HAND-BOOK

OF

METEOROLOGICAL TABLES

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BY

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WASHINGTON, D. C.
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PREFACE.

The only complete collection of meteorological tables is that of Guyot, first published by the Smithsonian Institution in 1852. This has been enlarged in successive revisions until the 212 pages of the original work have grown to 738 in the fourth edition, forming a very valuable compilation of all the more important meteorological and physical tables in use since 1850. This last edition leaves nothing to be desired from a historical stand-point, but the working meteorologist still lacks a collection of the best tables, in compact form, convenient for use, and at small cost. The tables now presented have been in constant use by the author, and their present form is the result of many years' experience in the application of various tables. They are published, not to supersede the earlier and more extended collection, but as a convenient hand-book.

In the general plan of the work, the main points to be noted are as follows:

1. As far as possible, all tables relating to the same subject are placed together.

2. All similar tables are united. Thus, the three tables for converting millimetres to inches, on pp. 200, 225 and 258 of Guyot[1] form Table XXXII of this collection. In addition to compactness and ease of reference, this gives a table for all conversions needed, while previously there has been published no single table that will convert barometrical observations at the highest stations, *e. g.* Pike's Peak.

3. Only one table is given for each computation. For barometric hypsometry, in place of Guyot's seven tables in both English and French measures, only one is given in each, the best and most convenient, as found by six year's constant use of various tables.

4. Only tables needed for current meteorological work are included.

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[1]All references to Guyot are to 4th ed., Wash., 1884.

Thus, tables for converting Reaumur temperatures, Russian half lines, etc., are omitted, because needed to-day only for the reduction of old observations, and this rare use can well be supplied by Guyot.

5. The latest determination of the metre is used in all linear tables. The old length of the metre, 39.37079 in., has been used thus far, in all tables in this country and abroad, the usual argument being the inadvisability of a change previous to an authoritative determination. But the length of the metre is now known so closely that the outstanding correction can affect none of the values in our tables, while the old length, when the tables are carried to .001 in. (.025 mm.), often introduces a ~~nearly constant~~ error of .001 in. The length adopted is 39.3702 in., for which determination I am indebted to Professor W. A. Rogers, of Bowdoin College, who is confident that the true value lies between 39.37015 and 39.3702 in. An error of .0001 is hardly possible, and as the change of .0006 from the old value makes a change of only .001 in. in the conversion, it is clear that any possible outstanding error is far within the tabular values. A table computed on the new length will require no modification in the future.

6. Several new tables are introduced. At the head of each table, or in its introduction, the authority is stated. If the table be new, *i. e.*, recomputed or never before published in this form, it is marked ("Original"); if copied or enlarged from Guyot or any other author, the source is given.

7. At the end of the volume are given plates showing the distribution of the more important meteorological elements for the United States.

I gratefully acknowledge the great assistance rendered me by Mr. C. J. Sawyer in the final arrangement of the hand-book.

H. A. HAZEN.

WASHINGTON, D. C., August 7, 1888.

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TABLES.

I–VII. TEMPERATURE TABLES.

TABLE I.—CONVERSION OF READINGS F. INTO C.

(Enlarged from Guyot, p. 13).

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	F.
°	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	°
130	54.44	54.50	54.56	54.61	54.67	54.72	54.78	54.83	54.89	54.94	**130**
129	53.89	53.94	54.00	54.06	54.11	54.17	54.22	54.28	54.33	54.39	**129**
128	53.33	53.39	53.44	53.50	53.56	53.61	53.67	53.72	53.78	53.83	**128**
127	52.78	52.83	52.89	52.94	53.00	53.06	53.11	53.17	53.22	53.28	**127**
126	52.22	52.28	52.33	52.39	52.44	52.50	52.56	52.61	52.67	52.72	**126**
125	51.67	51.72	51.78	51.83	51.89	51.94	52.00	52.06	52.11	52.17	**125**
124	51.11	51.17	51.22	51.28	51.33	51.39	51.44	51.50	51.56	51.61	**124**
123	50.56	50.61	50.67	50.72	50.78	50.83	50.89	50.94	51.00	51.06	**123**
122	50.00	50.06	50.11	50.17	50.22	50.28	50.33	50.39	50.44	50.50	**122**
121	49.44	49.50	49.56	49.61	49.67	49.72	49.78	49.83	49.89	49.94	**121**
120	48.89	48.94	49.00	49.06	49.11	49.17	49.22	49.28	49.33	49.39	**120**
119	48.33	48.39	48.44	48.50	48.56	48.61	48.67	48.72	48.78	48.83	**119**
118	47.78	47.83	47.89	47.94	48.00	48.06	48.11	48.17	48.22	48.28	**118**
117	47.22	47.28	47.33	47.39	47.44	47.50	47.56	47.61	47.67	47.72	**117**
116	46.67	46.72	46.78	46.83	46.89	46.94	47.00	47.06	47.11	47.17	**116**
115	46.11	46.17	46.22	46.28	46.33	46.39	46.44	46.50	46.56	46.61	**115**
114	45.56	45.61	45.67	45.72	45.78	45.83	45.89	45.94	46.00	46.06	**114**
113	45.00	45.06	45.11	45.17	45.22	45.28	45.33	45.39	45.44	45.50	**113**
112	44.44	44.50	44.56	44.61	44.67	44.72	44.78	44.83	44.89	44.94	**112**
111	43.89	43.94	44.00	44.06	44.11	44.17	44.22	44.28	44.33	44.39	**111**
110	43.33	43.39	43.44	43.50	43.56	43.61	43.67	43.72	43.78	43.83	**110**
109	42.78	42.83	42.89	42.94	43.00	43.06	43.11	43.17	43.22	43.28	**109**
108	42.22	42.28	42.33	42.39	42.44	42.50	42.56	42.61	42.67	42.72	**108**
107	41.67	41.72	41.78	41.83	41.89	41.94	42.00	42.06	42.11	42.17	**107**
106	41.11	41.17	41.22	41.28	41.33	41.39	41.44	41.50	41.56	41.61	**106**
105	40.56	40.61	40.67	40.72	40.78	40.83	40.89	40.94	41.00	41.06	**105**
104	40.00	40.06	40.11	40.17	40.22	40.28	40.33	40.39	40.44	40.50	**104**
103	39.44	39.50	39.56	39.61	39.67	39.72	39.78	39.83	39.89	39.94	**103**
102	38.89	38.94	39.00	39.06	39.11	39.17	39.22	39.28	39.33	39.39	**102**
101	38.33	38.39	38.44	38.50	38.56	38.61	38.67	38.72	38.78	38.83	**101**
100	37.78	37.83	37.89	37.94	38.00	38.06	38.11	38.17	38.22	38.28	**100**
99	37.22	37.28	37.33	37.39	37.44	37.50	37.56	37.61	37.67	37.72	**99**
98	36.67	36.72	36.78	36.83	36.89	36.94	37.00	37.06	37.11	37.17	**98**
97	36.11	36.17	36.22	36.28	36.33	36.39	36.44	36.50	36.56	36.61	**97**
96	35.56	35.61	35.67	35.72	35.78	35.83	35.89	35.94	36.00	36.06	**96**
95	35.00	35.06	35.11	35.17	35.22	35.28	35.33	35.39	35.44	35.50	**95**
94	34.44	34.50	34.56	34.61	34.67	34.72	34.78	34.83	34.89	34.94	**94**
93	33.89	33.94	34.00	34.06	34.11	34.17	34.22	34.28	34.33	34.39	**93**
92	33.33	33.39	33.44	33.50	33.56	33.61	33.67	33.72	33.78	33.83	**92**
91	32.78	32.83	32.89	32.94	33.00	33.06	33.11	33.17	33.22	33.28	**91**
90	32.22	32.28	32.33	32.39	32.44	32.50	32.56	32.61	32.67	32.72	**90**
89	31.67	31.72	31.78	31.83	31.89	31.94	32.00	32.06	32.11	32.17	**89**
88	31.11	31.17	31.22	31.28	31.33	31.39	31.44	31.50	31.56	31.61	**88**
87	30.56	30.61	30.67	30.72	30.78	30.83	30.89	30.94	31.00	31.06	**87**
86	30.00	30.06	30.11	30.17	30.22	30.28	30.33	30.39	30.44	30.50	**86**
85	29.44	29.50	29.56	29.61	29.67	29.72	29.78	29.83	29.89	29.94	**85**
84	28.89	28.94	29.00	29.06	29.11	29.17	29.22	29.28	29.33	29.39	**84**
83	28.33	28.39	28.44	28.50	28.56	28.61	28.67	28.72	28.78	28.83	**83**
82	27.78	27.83	27.89	27.94	28.00	28.06	28.11	28.17	28.22	28.28	**82**
81	27.22	27.28	27.33	27.39	27.44	27.50	27.56	27.61	27.67	27.72	**81**
80	26.67	26.72	26.78	26.83	26.89	26.94	27.00	27.06	27.11	27.17	**80**
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	

I.—READINGS F. INTO C.

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	F.
°	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	°
80	26.67	26.72	26.78	26.83	26.89	26.94	27.00	27.06	27.11	27.17	**80**
79	26.11	26.17	26.22	26.28	26.33	26.39	26.44	26.50	26.56	26.61	**79**
78	25.56	25.61	25.67	25.72	25.78	25.83	25.89	25.94	26.00	26.06	**78**
77	25.00	25.06	25.11	25.17	25.22	25.28	25.33	25.39	25.44	25.50	**77**
76	24.44	24.50	24.56	24.61	24.67	24.72	24.78	24.83	24.89	24.94	**76**
75	23.89	23.94	24.00	24.06	24.11	24.17	24.22	24.28	24.33	24.39	**75**
74	23.33	23.39	23.44	23.50	23.56	23.61	23.67	23.72	23.78	23.83	**74**
73	22.78	22.83	22.89	22.94	23.00	23.06	23.11	23.17	23.22	23.28	**73**
72	22.22	22.28	22.33	22.39	22.44	22.50	22.56	22.61	22.67	22.72	**72**
71	21.67	21.72	21.78	21.83	21.89	21.94	22.00	22.06	22.11	22.17	**71**
70	21.11	21.17	21.22	21.28	21.33	21.39	21.44	21.50	21.56	21.61	**70**
69	20.56	20.61	20.67	20.72	20.78	20.83	20.89	20.94	21.00	21.06	**69**
68	20.00	20.06	20.11	20.17	20.22	20.28	20.33	20.39	20.44	20.50	**68**
67	19.44	19.50	19.56	19.61	19.67	19.72	19.78	19.83	19.89	19.94	**67**
66	18.89	18.94	19.00	19.06	19.11	19.17	19.22	19.28	19.33	19.39	**66**
65	18.33	18.39	18.44	18.50	18.56	18.61	18.67	18.72	18.78	18.83	**65**
64	17.78	17.83	17.89	17.94	18.00	18.06	18.11	18.17	18.22	18.28	**64**
63	17.22	17.28	17.33	17.39	17.44	17.50	17.56	17.61	17.67	17.72	**63**
62	16.67	16.72	16.78	16.83	16.89	16.94	17.00	17.06	17.11	17.17	**62**
61	16.11	16.17	16.22	16.28	16.33	16.39	16.44	16.50	16.56	16.61	**61**
60	15.56	15.61	15.67	15.72	15.78	15.83	15.89	15.94	16.00	16.06	**60**
59	15.00	15.06	15.11	15.17	15.22	15.28	15.33	15.39	15.44	15.50	**59**
58	14.44	14.50	14.56	14.61	14.67	14.72	14.78	14.83	14.89	14.94	**58**
57	13.89	13.94	14.00	14.06	14.11	14.17	14.22	14.28	14.33	14.39	**57**
56	13.33	13.39	13.44	13.50	13.56	13.61	13.67	13.72	13.78	13.83	**56**
55	12.78	12.83	12.89	12.94	13.00	13.06	13.11	13.17	13.22	13.28	**55**
54	12.22	12.28	12.33	12.39	12.44	12.50	12.56	12.61	12.67	12.72	**54**
53	11.67	11.72	11.78	11.83	11.89	11.94	12.00	12.06	12.11	12.17	**53**
52	11.11	11.17	11.22	11.28	11.33	11.39	11.44	11.50	11.56	11.61	**52**
51	10.56	10.61	10.67	10.72	10.78	10.83	10.89	10.94	11.00	11.06	**51**
50	10.00	10.06	10.11	10.17	10.22	10.28	10.33	10.39	10.44	10.50	**50**
49	9.44	9.50	9.56	9.61	9.67	9.72	9.78	9.83	9.89	9.94	**49**
48	8.89	8.94	9.00	9.06	9.11	9.17	9.22	9.28	9.33	9.39	**48**
47	8.33	8.39	8.44	8.50	8.56	8.61	8.67	8.72	8.78	8.83	**47**
46	7.78	7.83	7.89	7.94	8.00	8.06	8.11	8.17	8.22	8.28	**46**
45	7.22	7.28	7.33	7.39	7.44	7.50	7.56	7.61	7.67	7.72	**45**
44	6.67	6.72	6.78	6.83	6.89	6.94	7.00	7.06	7.11	7.17	**44**
43	6.11	6.17	6.22	6.28	6.33	6.39	6.44	6.50	6.56	6.61	**43**
42	5.56	5.61	5.67	5.72	5.78	5.83	5.89	5.94	6.00	6.06	**42**
41	5.00	5.06	5.11	5.17	5.22	5.28	5.33	5.39	5.44	5.50	**41**
40	4.44	4.50	4.56	4.61	4.67	4.72	4.78	4.83	4.89	4.94	**40**
39	3.89	3.94	4.00	4.06	4.11	4.17	4.22	4.28	4.33	4.39	**39**
38	3.33	3.39	3.44	3.50	3.56	3.61	3.67	3.72	3.78	3.83	**38**
37	2.78	2.83	2.89	2.94	3.00	3.06	3.11	3.17	3.22	3.28	**37**
36	2.22	2.28	2.33	2.39	2.44	2.50	2.56	2.61	2.67	2.72	**36**
35	1.67	1.72	1.78	1.83	1.89	1.94	2.00	2.06	2.11	2.17	**35**
34	1.11	1.17	1.22	1.28	1.33	1.39	1.44	1.50	1.56	1.61	**34**
33	0.56	0.61	0.67	0.72	0.78	0.83	0.89	0.94	1.00	1.06	**33**
32	0.00	0.06	0.11	0.17	0.22	0.28	0.33	0.39	0.44	0.50	**32**
31	−0.56	−0.50	−0.44	−0.39	−0.33	−0.28	−0.22	0.17	0.11	−0.06	**31**
30	−1.11	−1.06	−1.00	−0.94	−0.89	−0.83	−0.78	−0.72	−0.67	−0.61	**30**
	.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**	

I.—READINGS F. INTO C.

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	F.
°	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	°
30	− 1.11	− 1.06	− 1.00	− 0.94	− 0.89	− 0.83	− 0.78	− 0.72	− 0.67	− 0.61	30
29	− 1.67	− 1.61	− 1.56	− 1.50	− 1.44	− 1.39	− 1.33	− 1.28	− 1.22	− 1.17	29
28	− 2.22	− 2.17	− 2.11	− 2.06	− 2.00	− 1.94	− 1.89	− 1.83	− 1.78	− 1.72	28
27	− 2.78	− 2.72	− 2.67	− 2.61	− 2.56	− 2.50	− 2.44	− 2.39	− 2.33	− 2.28	27
26	− 3.33	− 3.28	− 3.22	− 3.17	− 3.11	− 3.06	− 3.00	− 2.94	− 2.89	− 2.83	26
25	− 3.89	− 3.83	− 3.78	− 3.72	− 3.67	− 3.61	− 3.56	− 3.50	− 3.44	− 3.39	25
24	− 4.44	− 4.39	− 4.33	− 4.28	− 4.22	− 4.17	− 4.11	− 4.06	− 4.00	− 3.94	24
23	− 5.00	− 4.94	− 4.89	− 4.83	− 4.78	− 4.72	− 4.67	− 4.61	− 4.56	− 4.50	23
22	− 5.56	− 5.50	− 5.44	− 5.39	− 5.33	− 5.28	− 5.22	− 5.17	− 5.11	− 5.06	22
21	− 6.11	− 6.06	− 6.00	− 5.94	− 5.89	− 5.83	− 5.78	− 5.72	− 5.67	− 5.61	21
20	− 6.67	− 6.61	− 6.56	− 6.50	− 6.44	− 6.39	− 6.33	− 6.28	− 6.22	− 6.17	20
19	− 7.22	− 7.17	− 7.11	− 7.06	− 7.00	− 6.94	− 6.89	− 6.83	− 6.78	− 6.72	19
18	− 7.78	− 7.72	− 7.67	− 7.61	− 7.56	− 7.50	− 7.44	− 7.39	− 7.33	− 7.28	18
17	− 8.33	− 8.28	− 8.22	− 8.17	− 8.11	− 8.06	− 8.00	− 7.94	− 7.89	− 7.83	17
16	− 8.89	− 8.83	− 8.78	− 8.72	− 8.67	− 8.61	− 8.56	− 8.50	− 8.44	− 8.39	16
15	− 9.44	− 9.39	− 9.33	− 9.28	− 9.22	− 9.17	− 9.11	− 9.06	− 9.00	− 8.94	15
14	−10.00	− 9.94	− 9.89	− 9.83	− 9.78	− 9.72	− 9.67	− 9.61	− 9.56	− 9.50	14
13	−10.56	−10.50	−10.44	−10.39	−10.33	−10.28	−10.22	−10.17	−10.11	−10.06	13
12	−11.11	−11.06	−11.00	−10.94	−10.89	−10.83	−10.78	−10.72	−10.67	−10.61	12
11	−11.67	−11.61	−11.56	−11.50	−11.44	−11.39	−11.33	−11.28	−11.22	−11.17	11
10	−12.22	−12.17	−12.11	−12.06	−12.00	−11.94	−11.89	−11.83	−11.78	−11.72	10
9	−12.78	−12.72	−12.67	−12.61	−12.56	−12.50	−12.44	−12.39	−12.33	−12.28	9
8	−13.33	−13.28	−13.22	−13.17	−13.11	−13.06	−13.00	−12.94	−12.89	−12.83	8
7	−13.89	−13.83	−13.78	−13.72	−13.67	−13.61	−13.56	−13.50	−13.44	−13.39	7
6	−14.44	−14.39	−14.33	−14.28	−14.22	−14.17	−14.11	−14.06	−14.00	−13.94	6
5	−15.00	−14.94	−14.89	−14.83	−14.78	−14.72	−14.67	−14.61	−14.56	−14.50	5
4	−15.56	−15.50	−15.44	−15.39	−15.33	−15.28	−15.22	−15.17	−15.11	−15.06	4
3	−16.11	−16.06	−16.00	−15.94	−15.89	−15.83	−15.78	−15.72	−15.67	−15.61	3
2	−16.67	−16.61	−16.56	−16.50	−16.44	−16.39	−16.33	−16.28	−16.22	−16.17	2
1	−17.22	−17.17	−17.11	−17.06	−17.00	−16.94	−16.89	−16.83	−16.78	−16.72	1
0	−17.78	−17.72	−17.67	−17.61	−17.56	−17.50	−17.44	−17.39	−17.33	−17.28	0
− 0	−17.78	−17.83	−17.89	−17.94	−18.00	−18.06	−18.11	−18.17	−18.22	−18.28	− 0
− 1	−18.33	−18.39	−18.44	−18.50	−18.56	−18.61	−18.67	−18.72	−18.78	−18.83	− 1
− 2	−18.89	−18.94	−19.00	−19.06	−19.11	−19.17	−19.22	−19.28	−19.33	−19.39	− 2
− 3	−19.44	−19.50	−19.56	−19.61	−19.67	−19.72	−19.78	−19.83	−19.89	−19.94	− 3
− 4	−20.00	−20.06	−20.11	−20.17	−20.22	−20.28	−20.33	−20.39	−20.44	−20.50	− 4
− 5	−20.56	−20.61	−20.67	−20.72	−20.78	−20.83	−20.89	−20.94	−21.00	−21.06	− 5
− 6	−21.11	−21.17	−21.22	−21.28	−21.33	−21.39	−21.44	−21.50	−21.56	−21.61	− 6
− 7	−21.67	−21.72	−21.78	−21.83	−21.89	−21.94	−22.00	−22.06	−22.11	−22.17	− 7
− 8	−22.22	−22.28	−22.33	−22.39	−22.44	−22.50	−22.56	−22.61	−22.67	−22.72	− 8
− 9	−22.78	−22.83	−22.89	−22.94	−23.00	−23.06	−23.11	−23.17	−23.22	−23.28	− 9
−10	−23.33	−23.39	−23.44	−23.50	−23.56	−23.61	−23.67	−23.72	−23.78	−23.83	−10
−11	−23.89	−23.94	−24.00	−24.06	−24.11	−24.17	−24.22	−24.28	−24.33	−24.39	−11
−12	−24.44	−24.50	−24.56	−24.61	−24.67	−24.72	−24.78	−24.83	−24.89	−24.94	−12
−13	−25.00	−25.06	−25.11	−25.17	−25.22	−25.28	−25.33	−25.39	−25.44	−25.50	−13
−14	−25.56	−25.61	−25.67	−25.72	−25.78	−25.83	−25.89	−25.94	−26.00	−26.06	−14
−15	−26.11	−26.17	−26.22	−26.28	−26.33	−26.39	−26.44	−26.50	−26.56	−26.61	−15
−16	−26.67	−26.72	−26.78	−26.83	−26.89	−26.94	−27.00	−27.06	−27.11	−27.17	−16
−17	−27.22	−27.28	−27.33	−27.39	−27.44	−27.50	−27.56	−27.61	−27.67	−27.72	−17
−18	−27.78	−27.83	−27.89	−27.94	−28.00	−28.06	−28.11	−28.17	−28.22	−28.28	−18
−19	−28.33	−28.39	−28.44	−28.50	−28.56	−28.61	−28.67	−28.72	−28.78	−28.83	−19
−20	−28.89	−28.94	−29.00	−29.06	−29.11	−29.17	−29.22	−29.28	−29.33	−29.39	−20
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	

I.—READINGS F. INTO C.

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	F.
°	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	°
−20	−28.89	−28.94	−29.00	−29.06	−29.11	−29.17	−29.22	−29.28	−29.33	−29.39	−20
−21	−29.44	−29.50	−29.56	−29.61	−29.67	−29.72	−29.78	−29.83	−29.89	−29.94	−21
−22	−30.00	−30.06	−30.11	−30.17	−30.22	−30.28	−30.33	−30.39	−30.44	−30.50	−22
−23	−30.56	−30.61	−30.67	−30.72	−30.78	−30.83	−30.89	−30.94	−31.00	−31.06	−23
−24	−31.11	−31.17	−31.22	−31.28	−31.33	−31.39	−31.44	−31.50	−31.56	−31.61	−24
−25	−31.67	−31.72	−31.78	−31.83	−31.89	−31.94	−32.00	−32.06	−32.11	−32.17	−25
−26	−32.22	−32.28	−32.33	−32.39	−32.44	−32.50	−32.56	−32.61	−32.67	−32.72	−26
−27	−32.78	−32.83	−32.89	−32.94	−33.00	−33.06	−33.11	−33.17	−33.22	−33.28	−27
−28	−33.33	−33.39	−33.44	−33.50	−33.56	−33.61	−33.67	−33.72	−33.78	−33.83	−28
−29	−33.89	−33.94	−34.00	−34.06	−34.11	−34.17	−34.22	−34.28	−34.33	−34.39	−29
−30	−34.44	−34.50	−34.56	−34.61	−34.67	−34.72	−34.78	−34.83	−34.89	−34.94	−30
−31	−35.00	−35.06	−35.11	−35.17	−35.22	−35.28	−35.33	−35.39	−35.44	−35.50	−31
−32	−35.56	−35.61	−35.67	−35.72	−35.78	−35.83	−35.89	−35.94	−36.00	−36.06	−32
−33	−36.11	−36.17	−36.22	−36.28	−36.33	−36.39	−36.44	−36.50	−36.56	−36.61	−33
−34	−36.67	−36.72	−36.78	−36.83	−36.89	−36.94	−37.00	−37.06	−37.11	−37.17	−34
−35	−37.22	−37.28	−37.33	−37.39	−37.44	−37.50	−37.56	−37.61	−37.67	−37.72	−35
−36	−37.78	−37.83	−37.89	−37.94	−38.00	−38.06	−38.11	−38.17	−38.22	−38.28	−36
−37	−38.33	−38.39	−38.44	−38.50	−38.56	−38.61	−38.67	−38.72	−38.78	−38.83	−37
−38	−38.89	−38.94	−39.00	−39.06	−39.11	−39.17	−39.22	−39.28	−39.33	−39.39	−38
−39	−39.44	−39.50	−39.56	−39.61	−39.67	−39.72	−39.78	−39.83	−39.89	−39.94	−39
−40	−40.00	−40.06	−40.11	−40.17	−40.22	−40.28	−40.33	−40.39	−40.44	−40.50	−40
−41	−40.56	−40.61	−40.67	−40.72	−40.78	−40.83	−40.89	−40.94	−41.00	−41.06	−41
−42	−41.11	−41.17	−41.22	−41.28	−41.33	−41.39	−41.44	−41.50	−41.56	−41.61	−42
−43	−41.67	−41.72	−41.78	−41.83	−41.89	−41.94	−42.00	−42.06	−42.11	−42.17	−43
−44	−42.22	−42.28	−42.33	−42.39	−42.44	−42.50	−42.56	−42.61	−42.67	−42.72	−44
−45	−42.78	−42.83	−42.89	−42.94	−43.00	−43.06	−43.11	−43.17	−43.22	−43.28	−45
−46	−43.33	−43.39	−43.44	−43.50	−43.56	−43.61	−43.67	−43.72	−43.78	−43.83	−46
−47	−43.89	−43.94	−44.00	−44.06	−44.11	−44.17	−44.22	−44.28	−44.33	−44.39	−47
−48	−44.44	−44.50	−44.56	−44.61	−44.67	−44.72	−44.78	−44.83	−44.89	−44.94	−48
−49	−45.00	−45.06	−45.11	−45.17	−45.22	−45.28	−45.33	−45.39	−45.44	−45.50	−49
−50	−45.56	−45.61	−45.67	−45.72	−45.78	−45.83	−45.89	−45.94	−46.00	−46.06	−50
−51	−46.11	−46.17	−46.22	−46.28	−46.33	−46.39	−46.44	−46.50	−46.56	−46.61	−51
−52	−46.67	−46.72	−46.78	−46.83	−46.89	−46.94	−47.00	−47.06	−47.11	−47.17	−52
−53	−47.22	−47.28	−47.33	−47.39	−47.44	−47.50	−47.56	−47.61	−47.67	−47.72	−53
−54	−47.78	−47.83	−47.89	−47.94	−48.00	−48.06	−48.11	−48.17	−48.22	−48.28	−54
−55	−48.33	−48.39	−48.44	−48.50	−48.56	−48.61	−48.67	−48.72	−48.78	−48.83	−55
−56	−48.89	−48.94	−49.00	−49.06	−49.11	−49.17	−49.22	−49.28	−49.33	−49.39	−56
−57	−49.44	−49.50	−49.56	−49.61	−49.67	−49.72	−49.78	−49.83	−49.89	−49.94	−57
−58	−50.00	−50.06	−50.11	−50.17	−50.22	−50.28	−50.33	−50.39	−50.44	−50.50	−58
−59	−50.56	−50.61	−50.67	−50.72	−50.78	−50.83	−50.89	−50.94	−51.00	−51.06	−59
−60	−51.11	−51.17	−51.22	−51.28	−51.33	−51.39	−51.44	−51.50	−51.56	−51.61	−60
−61	−51.67	−51.72	−51.78	−51.83	−51.89	−51.94	−52.00	−52.06	−52.11	−52.17	−61
−62	−52.22	−52.28	−52.33	−52.39	−52.44	−52.50	−52.56	−52.61	−52.67	−52.72	−62
−63	−52.78	−52.83	−52.89	−52.94	−53.00	−53.06	−53.11	−53.17	−53.22	−53.28	−63
−64	−53.33	−53.39	−53.44	−53.50	−53.56	−53.61	−53.67	−53.72	−53.78	−53.83	−64
−65	−53.89	−53.94	−54.00	−54.06	−54.11	−54.17	−54.22	−54.28	−54.33	−54.39	−65
−66	−54.44	−54.50	−54.56	−54.61	−54.67	−54.72	−54.78	−54.83	−54.89	−54.94	−66
−67	−55.00	−55.06	−55.11	−55.17	−55.22	−55.28	−55.33	−55.39	−55.44	−55.50	−67
−68	−55.56	−55.61	−55.67	−55.72	−55.78	−55.83	−55.89	−55.94	−56.00	−56.06	−68
−69	−56.11	−56.17	−56.22	−56.28	−56.33	−56.39	−56.44	−56.50	−56.56	−56.61	−69
−70	−56.67	−56.72	−56.78	−56.83	−56.89	−56.94	−57.00	−57.06	−57.11	−57.17	−70
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	

TABLE II.—CONVERSION OF READINGS C. INTO READINGS F.

(Enlarged from Guyot, p. 25).

C.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	C.
°	F.	F.	F.		F.	F.	F.	F.	F.	F.	
50	122.00	122.18	122.36	122.54	122.72	122.90	123.08	123.26	123.44	123.62	50
49	120.20	120.38	120.56	120.74	120.92	121.10	121.28	121.46	121.64	121.82	49
48	118.40	118.58	118.76	118.94	119.12	119.30	119.48	119.66	119.84	120.02	48
47	116.60	116.78	116.96	117.14	117.32	117.50	117.68	117.86	118.04	118.22	47
46	114.80	114.98	115.16	115.34	115.52	115.70	115.88	116.06	116.24	116.42	46
45	113.00	113.18	113.36	113.54	113.72	113.90	114.08	114.26	114.44	114.62	45
44	111.20	111.38	111.56	111.74	111.92	112.10	112.28	112.46	112.64	112.82	44
43	109.40	109.58	109.76	109.94	110.12	110.30	110.48	110.66	110.84	111.02	43
42	107.60	107.78	107.96	108.14	108.32	108.50	108.68	108.86	109.04	109.22	42
41	105.80	105.98	106.16	106.34	106.52	106.70	106.88	107.06	107.24	107.42	41
40	104.00	104.18	104.36	104.54	104.72	104.90	105.08	105.26	105.44	105.62	40
39	102.20	102.38	102.56	102.74	102.92	103.10	103.28	103.46	103.64	103.82	39
38	100.40	100.58	100.76	100.94	101.12	101.30	101.48	101.66	101.84	102.02	38
37	98.60	98.78	98.96	99.14	99.32	99.50	99.68	99.86	100.04	100.22	37
36	96.80	96.98	97.16	97.34	97.52	97.70	97.88	98.06	98.24	98.42	36
35	95.00	95.18	95.36	95.54	95.72	95.90	96.08	96.26	96.44	96.62	35
34	93.20	93.38	93.56	93.74	93.92	94.10	94.28	94.46	94.64	94.82	34
33	91.40	91.58	91.76	91.94	92.12	92.30	92.48	92.66	92.84	93.02	33
32	89.60	89.78	89.96	90.14	90.32	90.50	90.68	90.86	91.04	91.22	32
31	87.80	87.98	88.16	88.34	88.52	88.70	88.88	89.06	89.24	89.42	31
30	86.00	86.18	86.36	86.54	86.72	86.90	87.08	87.26	87.44	87.62	30
29	84.20	84.38	84.56	84.74	84.92	85.10	85.28	85.46	85.64	85.82	29
28	82.40	82.58	82.76	82.94	83.12	83.30	83.48	83.66	83.84	84.02	28
27	80.60	80.78	80.96	81.14	81.32	81.50	81.68	81.86	82.04	82.22	27
26	78.80	78.98	79.16	79.34	79.52	79.70	79.88	80.06	80.24	80.42	26
25	77.00	77.18	77.36	77.54	77.72	77.90	78.08	78.26	78.44	78.62	25
24	75.20	75.38	75.56	75.74	75.92	76.10	76.28	76.46	76.64	76.82	24
23	73.40	73.58	73.76	73.94	74.12	74.30	74.48	74.66	74.84	75.02	23
22	71.60	71.78	71.96	72.14	72.32	72.50	72.68	72.86	73.04	73.22	22
21	69.80	69.98	70.16	70.34	70.52	70.70	70.88	71.06	71.24	71.42	21
20	68.00	68.18	68.36	68.54	68.72	68.90	69.08	69.26	69.44	69.62	20
19	66.20	66.38	66.56	66.74	66.92	67.10	67.28	67.46	67.64	67.82	19
18	64.40	64.58	64.76	64.94	65.12	65.30	65.48	65.66	65.84	66.02	18
17	62.60	62.78	62.96	63.14	63.32	63.50	63.68	63.86	64.04	64.22	17
16	60.80	60.98	61.16	61.34	61.52	61.70	61.88	62.06	62.24	62.42	16
15	59.00	59.18	59.36	59.54	59.72	59.90	60.08	60.26	60.44	60.62	15
14	57.20	57.38	57.56	57.74	57.92	58.10	58.28	58.46	58.64	58.82	14
13	55.40	55.58	55.76	55.94	56.12	56.30	56.48	56.66	56.84	57.02	13
12	53.60	53.78	53.96	54.14	54.32	54.50	54.68	54.86	55.04	55.22	12
11	51.80	51.98	52.16	52.34	52.52	52.70	52.88	53.06	53.24	53.42	11
10	50.00	50.18	50.36	50.54	50.72	50.90	51.08	51.26	51.44	51.62	10
9	48.20	48.38	48.56	48.74	48.92	49.10	49.28	49.46	49.64	49.82	9
8	46.40	46.58	46.76	46.94	47.12	47.30	47.48	47.66	47.84	48.02	8
7	44.60	44.78	44.96	45.14	45.32	45.50	45.68	45.86	46.04	46.22	7
6	42.80	42.98	43.16	43.34	43.52	43.70	43.88	44.06	44.24	44.42	6
5	41.00	41.18	41.36	41.54	41.72	41.90	42.08	42.26	42.44	42.62	5
4	39.20	39.38	39.56	39.74	39.92	40.10	40.28	40.46	40.64	40.82	4
3	37.40	37.58	37.76	37.94	38.12	38.30	38.48	38.66	38.84	39.02	3
2	35.60	35.78	35.96	36.14	36.32	36.50	36.68	36.86	37.04	37.22	2
1	33.80	33.98	34.16	34.34	34.52	34.70	34.88	35.06	35.24	35.42	1
0	32.00	32.18	32.36	32.54	32.72	32.90	33.08	33.26	33.44	33.62	0
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	

II.—READINGS C. INTO F.

C.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	C.
°	F.	F.	F.	F.	F.	F.	F.	F.	F	F.	°
-0	32.00	31.82	31.64	31.46	31.28	31.10	30.92	30.74	30.56	30.38	-0
- 1	30.20	30.02	29.84	29.66	29.48	29.30	29.12	28.94	28.76	28.58	- 1
- 2	28.40	28.22	28.04	27.86	27.68	27.50	27.32	27.14	26.96	26.78	- 2
- 3	26.60	26.42	26.24	26.06	25.88	25.70	25.52	25.34	25.16	24.98	- 3
- 4	24.80	24.62	24.44	24.26	24.08	23.90	23.72	23.54	23.36	23.18	- 4
- 5	23.00	22.82	22.64	22.46	22.28	22.10	21.92	21.74	21.56	21.38	- 5
- 6	21.20	21.02	20.84	20.66	20.48	20.30	20.12	19.94	19.76	19.58	- 6
- 7	19.40	19.22	19.04	18.86	18.68	18.50	18.32	18.14	17.96	17.78	- 7
- 8	17.60	17.42	17.24	17.06	16.88	16.70	16.52	16.34	16.16	15.98	- 8
- 9	15.80	15.62	15.44	15.26	15.08	14.90	14.72	14.54	14.36	14.18	- 9
-10	14.00	13.82	13.64	13.46	13.28	13.10	12.92	12.74	12.56	12.38	-10
-11	12.20	12.02	11.84	11.66	11.48	11.30	11.12	10.94	10.76	10.58	-11
-12	10.40	10.22	10.04	9.86	9.68	9.50	9.32	9.14	8.96	8.78	-12
-13	8.60	8.42	8.24	8.06	7.88	7.70	7.52	7.34	7.16	6.98	-13
-14	6.80	6.62	6.44	6.26	6.08	5.90	5.72	5.54	5.36	5.18	-14
-15	5.00	4.82	4.64	4.46	4.28	4.10	3.92	3.74	3.56	3.38	-15
-16	3.20	3.02	2.84	2.66	2.48	2.30	2.12	1.94	1.76	1.58	-16
-17	1.40	1.22	1.04	0.86	0.68	0.50	0.32	0.14	- 0.04	- 0.22	-17
-18	- 0.40	- 0.58	- 0.76	- 0.94	- 1.12	- 1.30	- 1.48	- 1.66	- 1.84	- 2.02	-18
-19	2.20	2.38	- 2.56	2.74	2.92	- 3.10	- 3.28	- 3.46	- 3.64	- 3.82	-19
-20	4.00	4.18	- 4.36	4.54	4.72	- 4.90	- 5.08	- 5.26	- 5.44	- 5.62	-20
-21	5.80	5.98	- 6.16	6.34	6.52	- 6.70	- 6.88	- 7.06	- 7.24	- 7.42	-21
-22	7.60	7.78	- 7.96	8.14	8.32	- 8.50	- 8.68	- 8.86	- 9.04	- 9.22	-22
-23	9.40	9.58	- 9.76	9.94	10.12	-10.30	-10.48	-10.66	-10.84	-11.02	-23
-24	11.20	11.38	-11.56	11.74	11.92	-12.10	-12.28	-12.46	-12.64	-12.82	-24
-25	13.00	13.18	-13.36	13.54	13.72	-13.90	-14.08	-14.26	-14.44	-14.62	-25
-26	14.80	14.98	-15.16	15.34	15.52	-15.70	-15.88	-16.06	-16.24	-16.42	-26
-27	16.60	16.78	-16.96	17.14	17.32	-17.50	-17.68	-17.86	-18.04	-18.22	-27
-28	18.40	18.58	-18.76	18.94	19.12	-19.30	-19.48	-19.66	-19.84	-20.02	-28
-29	20.20	20.38	-20.56	20.74	20.92	-21.10	-21.28	-21.46	-21.64	-21.82	-29
-30	-22.00	-22.18	-22.36	-22.54	-22.72	-22.90	-23.08	-23.26	-23.44	-23.62	-30
-31	-23.80	-23.98	-24.16	-24.34	-24.52	-24.70	-24.88	-25.06	-25.24	-25.42	-31
-32	-25.60	-25.78	-25.96	-26.14	-26.32	-26.50	-26.68	-26.86	-27.04	-27.22	-32
-33	-27.40	-27.58	-27.76	-27.94	-28.12	-28.30	-28.48	-28.66	-28.84	-29.02	-33
-34	-29.20	-29.38	-29.56	-29.74	-29.92	-30.10	-30.28	-30.46	-30.64	-30.82	-34
-35	-31.00	-31.18	-31.36	-31.54	-31.72	-31.90	-32.08	-32.26	-32.44	-32.62	-35
-36	-32.80	-32.98	-33.16	-33.34	-33.52	-33.70	-33.88	-34.06	-34.24	-34.42	-36
-37	-34.60	-34.78	-34.96	-35.14	-35.32	-35.50	-35.68	-35.86	-36.04	-36.22	-37
-38	-36.40	-36.58	-36.76	-36.94	-37.12	-37.30	-37.48	-37.66	-37.84	-38.02	-38
-39	-38.20	-38.38	-38.56	-38.74	-38.92	-39.10	-39.28	-39.46	-39.64	-39.82	-39
-40	-40.00	-40.18	-40.36	-40.54	-40.72	-40.90	-41.08	-41.26	-41.44	-41.62	-40
-41	-41.80	-41.98	-42.16	-42.34	-42.52	-42.70	-42.88	-43.06	-43.24	-43.42	-41
-42	-43.60	-43.78	-43.96	-44.14	-44.32	-44.50	-44.68	-44.86	-45.04	-45.22	-42
-43	-45.40	-45.58	-45.76	-45.94	-46.12	-46.30	-46.48	-46.66	-46.84	-47.02	-43
-44	-47.20	-47.38	-47.56	-47.74	-47.92	-48.10	-48.28	-48.46	-48.64	-48.82	-44
-45	-49.00	-49.18	-49.36	-49.54	-49.72	-49.90	-50.08	-50.26	-50.44	-50.62	-45
-46	-50.80	-50.98	-51.16	-51.34	-51.52	-51.70	-51.88	-52.06	-52.24	-52.42	-46
-47	-52.60	-52.78	-52.96	-53.14	-53.32	-53.50	-53.68	-53.86	-54.04	-54.22	-47
-48	-54.40	-54.58	-54.76	-54.94	-55.12	-55.30	-55.48	-55.66	-55.84	-56.02	-48
-49	-56.20	-56.38	-56.56	-56.74	-56.92	-57.10	-57.28	-57.46	-57.64	-57.82	-49
-50	-58.00	-58.18	-58.36	-58.54	-58.72	-58.90	-59.08	-59.26	-59.44	-59.62	-50
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	

TABLE III.—CONVERSION OF READINGS C. AND F. NEAR BOILING POINT.

(Guyot, p. 27.)

C.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	C
°	F.	F.	F.	F.	F.	F.	F.	F.	F.	F.	°
100	212.00	212.18	212.36	212.54	212.72	212.90	213.08	213.26	213.44	213.62	100
99	210.20	210.38	210.56	210.74	210.92	211.10	211.28	211.46	211.64	211.82	99
98	208.40	208.58	208.76	208.94	209.12	209.30	209.48	209.66	209.84	210.02	98
97	206.60	206.78	206.96	207.14	207.32	207.50	207.68	207.86	208.04	208.22	97
96	204.80	204.98	205.16	205.34	205.52	205.70	205.88	206.06	206.24	206.42	96
95	203.00	203.18	203.36	203.54	203.72	203.90	204.08	204.26	204.44	204.62	95
94	201.20	201.38	201.56	201.74	201.92	202.10	202.28	202.46	202.64	202.82	94
93	199.40	199.58	199.76	199.94	200.12	200.30	200.48	200.66	200.84	201.02	93
92	197.60	197.78	197.96	198.14	198.32	198.50	198.68	198.86	199.04	199.22	92
91	195.80	195.98	196.16	196.34	196.52	196.70	196.88	197.06	197.24	197.42	91
90	194.00	194.18	194.36	194.54	194.72	194.90	195.08	195.26	195.44	195.62	90
89	192.20	192.38	192.56	192.74	192.92	193.10	193.28	193.46	193.64	193.82	89

TABLE IV.—DEGREES F.—DEGREES C.

(Enlarged from Guyot, p. 34).

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	F.
°	C.	C.	C.	C.	C.	C.	C.	C.	C.	C.	°
0	0.00	0.06	0.11	0.17	0.22	0.28	0.33	0.39	0.44	0.50	0
1	0.56	0.61	0.67	0.72	0.78	0.83	0.89	0.94	1.00	1.06	1
2	1.11	1.17	1.22	1.28	1.33	1.39	1.44	1.50	1.56	1.61	2
3	1.67	1.72	1.78	1.83	1.89	1.94	2.00	2.06	2.11	2.17	3
4	2.22	2.28	2.33	2.39	2.44	2.50	2.56	2.61	2.67	2.72	4
5	2.78	2.83	2.89	2.94	3.00	3.06	3.11	3.17	3.22	3.28	5
6	3.33	3.39	3.44	3.50	3.56	3.61	3.67	3.72	3.78	3.83	6
7	3.89	3.94	4.00	4.06	4.11	4.17	4.22	4.28	4.33	4.39	7
8	4.44	4.50	4.56	4.61	4.67	4.72	4.78	4.83	4.89	4.94	8
9	5.00	5.06	5.11	5.17	5.22	5.28	5.33	5.39	5.44	5.50	9
10	5.56	5.61	5.67	5.72	5.78	5.83	5.89	5.94	6.00	6.06	10
11	6.11	6.17	6.22	6.28	6.33	6.39	6.44	6.50	6.56	6.61	11
12	6.67	6.72	6.78	6.83	6.89	6.94	7.00	7.06	7.11	7.17	12
13	7.22	7.28	7.33	7.39	7.44	7.50	7.56	7.61	7.67	7.72	13
14	7.78	7.83	7.89	7.94	8.00	8.06	8.11	8.17	8.22	8.28	14
15	8.33	8.39	8.44	8.50	8.56	8.61	8.67	8.72	8.78	8.83	15
16	8.89	8.94	9.00	9.06	9.11	9.17	9.22	9.28	9.33	9.39	16
17	9.44	9.50	9.56	9.61	9.67	9.72	9.78	9.83	9.89	9.94	17
18	10.00	10.06	10.11	10.17	10.22	10.28	10.33	10.39	10.44	10.50	18
19	10.56	10.61	10.67	10.72	10.78	10.83	10.89	10.94	11.00	11.06	19
20	11.11	11.17	11.22	11.28	11.33	11.39	11.44	11.50	11.56	11.61	20

TABLE V.—DEGREES C.—DEGREES F.

(Guyot, p. 35).

C.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	C.
°	F.	F.	F.	F.	F.	F.	F.	F.	F.	F.	°
0	0.00	0.18	0.36	0.54	0.72	0.90	1.08	1.26	1.44	1.62	0
1	1.80	1.98	2.16	2.34	2.52	2.70	2.88	3.06	3.24	3.42	1
2	3.60	3.78	3.96	4.14	4.32	4.50	4.68	4.86	5.04	5.22	2
3	5.40	5.58	5.76	5.94	6.12	6.30	6.48	6.66	6.84	7.02	3
4	7.20	7.38	7.56	7.74	7.92	8.10	8.28	8.46	8.64	8.82	4
5	9.00	9.18	9.36	9.54	9.72	9.90	10.08	10.26	10.44	10.62	5
6	10.80	10.98	11.16	11.34	11.52	11.70	11.88	12.06	12.24	12.42	6
7	12.60	12.78	12.96	13.14	13.32	13.50	13.68	13.86	14.04	14.22	7
8	14.40	14.58	14.76	14.94	15.12	15.30	15.48	15.66	15.84	16.02	8
9	16.20	16.38	16.56	16.74	16.92	17.10	17.28	17.46	17.64	17.82	9

TABLE VI.—VALUES OF THE INTENSITY OF SOLAR RADIATION J. AND SOLAR CONSTANT A. IN TERMS OF THE MEAN SOLAR CONSTANT A_0.

(Ferrel. Rep. C. S. O., 1885, pt. 2, p. 427).

DATE.	DAY OF YEAR	*it.*	LATITUDES										A.
			0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	
Jan. 1	1	00.99	.303	.265	.220	.169	.117	.066	.018	....	...	...	1.0335
16	16	15.78	.307	.271	.229	.180	.129	.078	.028	....	....	....	1.0324
Feb. 1	32	31.54	.312	.282	.244	.200	.150	.100	.048	.006	...	....	1.0288
15	47	45.34	.317	.293	.261	.223	.177	.118	.075	.027	....	...	1.0235
Mar. 1	60	59.14	.320	.303	.279	.245	.204	.158	.108	.056	.013	...	1.0173
16	75	73.93	.321	.313	.296	.270	.236	.195	.148	.097	.057	....	1.0096
Apr. 1	91	89.70	.317	.319	.312	.295	.269	.235	.195	.148	.101	.082	1.0009
16	106	104.49	.311	.321	.323	.315	.297	.271	.238	.201	.175	.177	0.9923
May 1	121	119.29	.303	.318	.330	.329	.320	.302	.278	.253	.255	.259	0.9841
16	136	134.05	.294	.318	.333	.339	.337	.327	.312	.298	.317	.322	0.9772
June 1	152	149.82	.287	.315	.334	.345	.349	.345	.337	.344	.360	.366	0.9714
16	167	164.60	.283	.313	.334	.348	.354	.353	.348	.361	.378	.384	0.9679
July 1	182	179.39	.283	.312	.333	.347	.352	.351	.345	.356	.373	.379	0.9666
16	197	194.13	.287	.314	.332	.342	.345	.340	.329	.331	.347	.352	0.9674
Aug. 1	213	209.94	.294	.316	.330	.334	.330	.318	.300	.282	.295	.300	0.9709
16	228	224.73	.303	.318	.325	.322	.310	.291	.264	.234	.227	.231	0.9760
Sept. 1	244	240.50	.310	.318	.316	.305	.285	.256	.220	.180	.139	.140	0.9828
16	259	255.29	.315	.315	.305	.284	.256	.220	.178	.130	.107	.043	0.9909
Oct. 1	274	270.07	.317	.308	.289	.261	.225	.183	.135	.084	.065	....	0.9995
16	289	284.86	.316	.298	.271	.236	.194	.147	.097	.047	.015	....	1.0080
Nov. 1	305	300.63	.312	.286	.251	.211	.164	.114	.063	.018	....	...	1.0164
16	320	315.42	.308	.276	.235	.190	.140	.089	.040	....	....	....	1.0235
Dec. 1	335	330.19	.304	.267	.224	.175	.124	.072	.024	...	....	...	1.0288
16	350	344.98	.302	.263	.218	.167	.115	.064	.016	....	....	...	1.0323
Year	...	.....	.305	.301	.289	.268	.241	.209	.173	.144	.133	.126	.....

TABLE VII.—DIMINUTION OF TEMPERATURE FOR EACH 100 METRES OF ASCENDING SATURATED AIR.

(Ferrel. Rep. C. S. O. 1885, pt. 2, p. 428).

PRESSURE.	TEMPERATURE C.									ALTITUDE FOR 0° C.
	10°.	5°.	0°.	5°.	10°.	15°.	20°.	25°.	30°.	
mm.	°	°	°	°	°	°	°	°	°	*metres.*
760	0.74	0.68	0.64	0.58	0.53	0.48	0.43	0.40	0.37	0
700	.73	.66	.63	.57	.51	.46	.42	.38	.36	660
600	.70	.63	.60	.54	.48	.43	.40	.36	.....	1897
500	.66	.60	.56	.50	.45	.40	.37	.....	.....	3357
400	.62	.55	.51	.46	.41	.37	.....	.....	.....	5142
300	.56	.49	.46	.42	... .	.....	.....	.....	.....	7550
200	.48	.41	.39	.....	.....	.....	... ..	.....	.....	10680

VIII–XVI. PRESSURE TABLES.

TABLE VIII.—REDUCTION OF BAROMETER READINGS TO FREEZING. ENGLISH.

(Enlarged from Guyot, p. 270.)

Inches.

F.	20.	20.5	21.	21.5	22	22.5	23	23.5	24.	24.5	25.	25.5	26.	F.
						ADD.								
0	.051	.053	.054	.055	.056	.058	.059	.060	.061	.063	.064	.065	.067	0
1	.049	.051	.052	.053	.054	.056	.057	.058	.059	.061	.062	.063	.064	1
2	.048	.049	.050	.051	.052	.054	.055	.056	.057	.058	.060	.061	.062	2
3	.046	.047	.048	.049	.050	.052	.053	.054	.055	.056	.057	.059	.060	3
4	.044	.045	.046	.047	.048	.050	.051	.052	.053	.054	.055	.056	.057	4
5	.042	.043	.044	.045	.046	.048	.049	.050	.051	.052	.053	.054	.055	5
6	.040	.042	.042	.044	.044	.046	.047	.048	.049	.050	.051	.052	.053	6
7	.039	.040	.041	.042	.042	.044	.044	.046	.046	.047	.048	.049	.050	7
8	.037	.038	.039	.040	.041	.041	.042	.043	.044	.045	.046	.047	.048	8
9	.035	.036	.037	.038	.039	.039	.040	.041	.042	.043	.044	.045	.046	9
10	.033	.034	.035	.036	.037	.037	.038	.039	.040	.041	.042	.042	.043	10
11	.031	.032	.033	.034	.035	.035	.036	.037	.038	.039	.039	.040	.041	11
12	.030	.030	.031	.032	.033	.033	.034	.035	.036	.036	.037	.038	.039	12
13	.028	.029	.029	.030	.031	.031	.032	.033	.033	.034	.035	.036	.036	13
14	.026	.027	.027	.028	.029	.029	.030	.031	.031	.032	.033	.033	.034	14
15	.024	.025	.026	.026	.027	.027	.028	.029	.029	.030	.030	.031	.032	15
16	.022	.023	.024	.024	.025	.025	.026	.026	.027	.028	.028	.029	.029	16
17	.021	.021	.022	.022	.023	.023	.024	.024	.025	.025	.026	.026	.027	17
18	.019	.019	.020	.020	.021	.021	.022	.022	.023	.023	.024	.024	.025	18
19	.017	.018	.018	.018	.019	.019	.020	.020	.021	.021	.021	.022	.022	19
20	.015	.016	.016	.016	.017	.017	.018	.018	.018	.019	.019	.020	.020	20
21	.014	.014	.014	.015	.015	.015	.015	.016	.016	.017	.017	.017	.018	21
22	.012	.012	.012	.013	.013	.013	.013	.014	.014	.014	.015	.015	.015	22
23	.010	.010	.010	.011	.011	.011	.011	.012	.012	.012	.012	.013	.013	23
24	.008	.008	.009	.009	.009	.009	.009	.010	.010	.010	.010	.010	.011	24
25	.006	.007	.007	.007	.007	.007	.007	.007	.008	.008	.008	.008	.008	25
26	.005	.005	.005	.005	.005	.005	.005	.005	.005	.006	.006	.006	.006	26
27	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.004	27
28	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	28
						SUBTRACT.								
29	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	29
30	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.004	.004	30
31	.005	.005	.005	.005	.005	.005	.005	.005	.005	.006	.006	.006	.006	31
32	.006	.006	.007	.007	.007	.007	.007	.007	.008	.008	.008	.008	.008	32
33	.008	.008	.008	.009	.009	.009	.009	.010	.010	.010	.010	.010	.011	33
34	.010	.010	.010	.011	.011	.011	.011	.012	.012	.012	.012	.013	.013	34
35	.012	.012	.012	.013	.013	.013	.013	.014	.014	.014	.015	.015	.015	35
36	.013	.014	.014	.014	.015	.015	.016	.016	.016	.017	.017	.017	.017	36
37	.015	.016	.016	.016	.017	.017	.018	.018	.018	.019	.019	.019	.020	37
38	.017	.017	.018	.018	.019	.019	.020	.020	.020	.021	.021	.022	.022	38
39	.019	.019	.020	.020	.021	.021	.022	.022	.023	.023	.024	.024	.024	39
40	.021	.021	.022	.022	.023	.023	.024	.024	.025	.025	.026	.026	.027	40
41	.022	.023	.024	.024	.025	.025	.026	.026	.027	.027	.028	.029	.029	41
42	.024	.025	.025	.026	.027	.027	.028	.028	.029	.030	.030	.031	.031	42
43	.026	.027	.027	.028	.029	.029	.030	.031	.031	.032	.032	.033	.034	43
44	.028	.029	.029	.030	.031	.031	.032	.033	.033	.034	.035	.035	.036	44
45	.030	.030	.031	.032	.033	.033	.034	.035	.035	.036	.037	.038	.038	45
46	.031	.032	.033	.034	.035	.035	.036	.037	.038	.038	.039	.040	.041	46
47	.033	.034	.035	.036	.036	.037	.038	.039	.040	.041	.041	.042	.043	47
48	.035	.036	.037	.038	.038	.039	.040	.041	.042	.043	.044	.045	.045	48
49	.037	.038	.039	.040	.040	.041	.042	.043	.044	.045	.046	.047	.048	49
50	.038	.039	.040	.041	.042	.043	.044	.045	.046	.047	.048	.049	.050	50

VIII.—BAROMETER TO FREEZING. ENGLISH.

Inches.

F.	20	20 5	21.	21.5	22.	22.5	23.	23 5	24.	24.5	25.	25.5	26.	F.
							SUBTRACT.							
50	.038	.039	.040	.041	.042	.043	.044	.045	.046	.047	.048	.049	.050	50
51	.040	.041	.042	.043	.044	.045	.046	.047	.048	.049	.050	.051	.052	51
52	.042	.043	.044	.045	.046	.047	.048	.049	.050	.052	.053	.054	.055	52
53	.044	.045	.046	.047	.048	.049	.050	.052	.053	.054	.055	.056	.057	53
54	.046	.047	.048	.049	.050	.051	.052	.054	.055	.056	.057	.058	.059	54
55	.047	.049	.050	.051	.052	.053	.055	.056	.057	.058	.059	.060	.062	55
56	.049	.050	.052	.053	.054	.055	.057	.058	.059	.060	.061	.063	.064	56
57	.051	.052	.054	.055	.056	.057	.059	.060	.061	.062	.064	.065	.066	57
58	.053	.054	.055	.057	.058	.059	.061	.062	.063	.065	.066	.067	.069	58
59	.055	.056	.057	.059	.060	.061	.063	.064	.065	.067	.068	.070	.071	59
60	.056	.058	.059	.061	.062	.063	.065	.066	.068	.069	.070	.072	.073	60
61	.058	.060	.061	.062	.064	.065	.067	.068	.070	.071	.073	.074	.075	61
62	.060	.061	.063	.064	.066	.067	.069	.070	.072	.073	.075	.076	.078	62
63	.062	.063	.065	.066	.068	.069	.071	.072	.074	.076	.077	.079	.080	63
64	.063	.065	.067	.068	.070	.071	.073	.075	.076	.078	.079	.081	.082	64
65	.065	.067	.068	.070	.072	.073	.075	.077	.078	.080	.082	.083	.085	65
66	.067	.069	.070	.072	.074	.075	.077	.079	.080	.082	.084	.085	.087	66
67	.069	.071	.072	.074	.076	.077	.079	.081	.083	.084	.086	.088	.089	67
68	.071	.072	.074	.076	.078	.079	.081	.083	.085	.086	.088	.090	.092	68
69	.072	.074	.076	.078	.080	.081	.083	.085	.087	.089	.090	.092	.094	69
70	.074	.076	.078	.080	.082	.083	.085	.087	.089	.091	.093	.095	.096	70
71	.076	.078	.080	.082	.083	.085	.087	.089	.091	.093	.095	.097	.099	71
72	.078	.080	.082	.084	.085	.087	.089	.091	.093	.095	.097	.099	.101	72
73	.079	.081	.083	.085	.087	.089	.091	.093	.095	.097	.099	.101	.103	73
74	.081	.083	.085	.087	.089	.091	.093	.095	.097	.099	.102	.104	.106	74
75	.083	.085	.087	.089	.091	.093	.095	.098	.100	.102	.104	.106	.108	75
76	.085	.087	.089	.091	.093	.095	.097	.100	.102	.104	.106	.108	.110	76
77	.087	.089	.091	.093	.095	.097	.100	.102	.104	.106	.108	.110	.112	77
78	.088	.091	.093	.095	.097	.099	.102	.104	.106	.108	.110	.113	.115	78
79	.090	.092	.095	.097	.099	.101	.104	.106	.108	.110	.113	.115	.117	79
80	.092	.094	.096	.099	.101	.103	.106	.108	.110	.113	.115	.117	.119	80
81	.094	.096	.098	.101	.103	.105	.108	.110	.112	.115	.117	.119	.122	81
82	.095	.098	.100	.103	.105	.107	.110	.112	.114	.117	.119	.122	.124	82
83	.097	.100	.102	.104	.107	.109	.112	.114	.117	.119	.121	.124	.126	83
84	.099	.101	.104	.106	.109	.111	.114	.116	.119	.121	.124	.126	.129	84
85	.101	.103	.106	.108	.111	.113	.116	.118	.121	.123	.126	.128	.131	85
86	.103	.105	.108	.110	.113	.115	.118	.120	.123	.126	.128	.131	.133	86
87	.104	.107	.109	.112	.115	.117	.120	.123	.125	.128	.130	.133	.136	87
88	.106	.109	.111	.114	.117	.119	.122	.125	.127	.130	.133	.135	.138	88
89	.108	.111	.113	.116	.119	.121	.124	.127	.129	.132	.135	.137	.140	89
90	.110	.112	.115	.118	.121	.123	.126	.129	.131	.134	.137	.140	.142	90
91	.111	.114	.117	.120	.122	.125	.128	.131	.134	.136	.139	.142	.145	91
92	.113	.116	.119	.122	.124	.127	.130	.133	.136	.139	.141	.144	.147	92
93	.115	.118	.121	.124	.126	.129	.132	.135	.138	.141	.144	.147	.149	93
94	.117	.120	.122	.125	.128	.131	.134	.137	.140	.143	.146	.149	.152	94
95	.118	.121	.124	.127	.130	.133	.136	.139	.142	.145	.148	.151	.154	95
96	.120	.123	.126	.129	.132	.135	.138	.141	.144	.147	.150	.153	.156	96
97	.122	.125	.128	.131	.134	.137	.140	.143	.146	.149	.152	.156	.159	97
98	.124	.127	.130	.133	.136	.139	.142	.145	.148	.152	.155	.158	.161	98
99	.125	.129	.132	.135	.138	.141	.144	.147	.151	.154	.157	.160	.163	99
100	.127	.130	.134	.137	.140	.143	.146	.150	.153	.156	.159	.162	.165	100

VIII.—BAROMETER TO FREEZING. ENGLISH.

Inches.

F.	26.	26.5	27.	27.5	28.	28.5	29.	29.5	30.	30.5	31.	F.
						ADD.						
22	.062	.063	.064	.066	.067	.068	.069	.070	.072	.073	.074	22
22.5	.061	.062	.063	.064	.065	.067	.068	.069	.070	.072	.073	22.5
23	.060	.061	.062	.063	.064	.065	.067	.068	.069	.071	.071	23
23.5	.058	.059	.061	.062	.063	.064	.065	.066	.068	.069	.070	23.5
24	.057	.058	.059	.061	.062	.063	.064	.065	.066	.067	.068	24
24.5	.056	.057	.058	.059	.060	.061	.063	.064	.065	.066	.067	24.5
25	.055	.056	.057	.058	.059	.060	.061	.062	.063	.065	.066	25
25.5	.054	.055	.056	.057	.058	.059	.060	.061	.062	.063	.064	25.5
26	.053	.054	.055	.056	.057	.058	.059	.060	.061	.062	.063	26
26.5	.052	.053	.054	.055	.056	.056	.058	.058	.059	.060	.061	26.5
27	.050	.051	.052	.053	.054	.055	.056	.057	.058	.059	.060	27
27.5	.049	.050	.051	.052	.053	.054	.055	.056	.057	.058	.058	27.5
28	.048	.049	.050	.051	.052	.053	.054	.054	.056	.056	.057	28
28.5	.047	.048	.049	.050	.050	.051	.052	.053	.054	.055	.056	28.5
29	.046	.046	.047	.048	.049	.050	.051	.052	.053	.054	.054	29
29.5	.045	.045	.046	.047	.048	.049	.050	.050	.051	.052	.053	29.5
30	.043	.044	.045	.046	.047	.047	.048	.049	.050	.051	.052	30
30.5	.042	.043	.044	.045	.045	.046	.047	.048	.049	.050	.051	30.5
31	.041	.042	.042	.043	.044	.045	.046	.046	.047	.048	.049	31
31.5	.040	.041	.041	.042	.043	.044	.045	.045	.046	.047	.048	31.5
32	.039	.039	.040	.041	.042	.042	.043	.044	.045	.045	.046	32
32.5	.038	.038	.039	.040	.040	.041	.042	.043	.044	.044	.045	32.5
33	.036	.037	.038	.038	.039	.040	.040	.041	.042	.043	.043	33
33.5	.035	.036	.037	.037	.038	.039	.039	.040	.041	.041	.042	33.5
34	.034	.035	.035	.036	.037	.037	.038	.038	.039	.040	.040	34
34.5	.033	.034	.034	.035	.035	.036	.036	.037	.038	.038	.039	34.5
35	.032	.032	.033	.033	.034	.035	.035	.036	.036	.037	.038	35
35.5	.031	.031	.032	.032	.033	.033	.034	.034	.035	.036	.036	35.5
36	.029	.030	.030	.031	.032	.032	.033	.033	.034	.034	.035	36
36.5	.028	.029	.029	.030	.030	.031	.031	.032	.032	.033	.033	36.5
37	.027	.027	.028	.028	.029	.030	.030	.031	.031	.032	.032	37
37.5	.026	.026	.026	.027	.027	.028	.028	.029	.030	.030	.031	37.5
38	.025	.025	.025	.026	.026	.027	.027	.028	.028	.029	.030	38
38.5	.024	.024	.024	.025	.025	.026	.026	.027	.027	.028	.028	38.5
39	.022	.023	.023	.024	.024	.024	.025	.025	.026	.026	.027	39
39.5	.021	.022	.022	.022	.023	.023	.024	.024	.024	.025	.025	39.5
40	.020	.020	.021	.021	.021	.022	.022	.023	.023	.023	.024	40
40.5	.019	.019	.019	.020	.020	.021	.021	.021	.022	.022	.023	40.5
41	.018	.018	.018	.019	.019	.019	.020	.020	.020	.021	.021	41
41.5	.017	.017	.017	.017	.018	.018	.018	.019	.019	.019	.020	41.5
42	.015	.016	.016	.016	.016	.017	.017	.017	.018	.018	.018	42
42.5	.014	.014	.015	.015	.015	.015	.016	.016	.016	.016	.017	42.5
43	.013	.013	.013	.014	.014	.014	.014	.015	.015	.015	.015	43
43.5	.012	.012	.012	.012	.012	.013	.013	.013	.014	.014	.014	43.5
44	.011	.011	.011	.011	.011	.012	.012	.012	.012	.012	.013	44
44.5	.010	.010	.010	.010	.010	.010	.011	.011	.011	.011	.011	44.5
45	.008	.008	.009	.009	.009	.009	.009	.009	.010	.010	.010	45
45.5	.007	.007	.007	.007	.007	.008	.008	.008	.008	.008	.009	45.5
46	.006	.006	.006	.006	.006	.006	.007	.007	.007	.007	.007	46
46.5	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	46.5
47	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	47
47.5	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	47.5
48	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	48
48.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	48.5

VIII.—BAROMETER TO FREEZING. ENGLISH.

Inches.

F.	26.	26.5	27.	27.5	28.	28.5	29.	29.5	30.	30.5	31.	F.
						SUBTRACT.						
28.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	28.5
29	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	29
29.5	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	29.5
30	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	30
30.5	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	30.5
31	.006	.006	.006	.006	.006	.006	.007	.007	.007	.007	.007	31
31.5	.007	.007	.007	.007	.007	.008	.008	.008	.008	.008	.008	31.5
32	.008	.008	.008	.009	.009	.009	.009	.009	.009	.010	.010	32
32.5	.009	.009	.010	.010	.010	.011	.011	.011	.011	.011	.011	32.5
33	.011	.011	.011	.011	.011	.012	.012	.012	.012	.012	.012	33
33.5	.012	.012	.012	.012	.012	.013	.013	.013	.014	.014	.014	33.5
34	.013	.013	.013	.014	.014	.014	.014	.015	.015	.015	.015	34
34.5	.014	.014	.014	.015	.015	.015	.016	.016	.016	.016	.017	34.5
35	.015	.015	.016	.016	.016	.017	.017	.017	.018	.018	.018	35
35.5	.016	.016	.017	.017	.017	.018	.018	.019	.019	.019	.020	35.5
36	.017	.018	.018	.019	.019	.019	.020	.020	.020	.021	.021	36
36.5	.018	.019	.019	.020	.020	.020	.021	.021	.021	.022	.022	36.5
37	.020	.020	.021	.021	.021	.022	.022	.022	.023	.023	.024	37
37.5	.021	.021	.022	.022	.022	.023	.023	.024	.024	.025	.025	37.5
38	.022	.023	.023	.023	.024	.024	.025	.025	.026	.026	.026	38
38.5	.023	.024	.024	.025	.025	.026	.026	.026	.027	.027	.027	38.5
39	.024	.025	.025	.026	.026	.027	.027	.028	.028	.029	.029	39
39.5	.025	.026	.026	.027	.027	.028	.028	.029	.029	.030	.030	39.5
40	.027	.027	.028	.028	.029	.029	.030	.030	.031	.031	.032	40
40.5	.028	.029	.029	.030	.030	.031	.031	.032	.032	.033	.033	40.5
41	.029	.030	.030	.031	.031	.032	.033	.033	.034	.034	.035	41
41.5	.030	.031	.031	.032	.032	.033	.034	.034	.035	.035	.036	41.5
42	.031	.032	.033	.033	.034	.034	.035	.036	.036	.037	.037	42
42.5	.033	.033	.034	.035	.035	.036	.036	.037	.038	.038	.039	42.5
43	.034	.034	.035	.036	.036	.037	.038	.038	.039	.040	.040	43
43.5	.035	.036	.036	.037	.038	.038	.039	.040	.040	.041	.041	43.5
44	.036	.037	.037	.038	.039	.040	.040	.041	.042	.042	.043	44
44.5	.037	.038	.039	.039	.040	.041	.042	.042	.043	.044	.044	44.5
45	.038	.039	.040	.041	.041	.042	.043	.044	.044	.045	.046	45
45.5	.040	.040	.041	.042	.042	.043	.044	.045	.046	.046	.047	45.5
46	.041	.042	.042	.043	.044	.045	.045	.046	.047	.048	.049	46
46.5	.042	.043	.044	.044	.045	.046	.047	.047	.048	.049	.050	46.5
47	.043	.044	.045	.046	.046	.047	.048	.049	.050	.051	.051	47
47.5	.044	.045	.046	.047	.047	.048	.049	.050	.051	.052	.053	47.5
48	.045	.046	.047	.048	.049	.050	.051	.052	.052	.053	.054	48
48.5	.046	.047	.048	.049	.050	.051	.052	.053	.054	.054	.055	48.5
49	.048	.049	.050	.050	.051	.052	.053	.054	.055	.056	.057	49
49.5	.049	.050	.051	.052	.052	.053	.054	.055	.056	.057	.058	49.5
50	.050	.051	.052	.053	.054	.055	.056	.057	.058	.059	.060	50
50.5	.051	.052	.053	.054	.055	.056	.057	.058	.059	.060	.061	50.5
51	.052	.053	.054	.055	.056	.057	.058	.059	.060	.061	.062	51
51.5	.054	.055	.056	.057	.058	.059	.060	.061	.062	.063	.064	51.5
52	.055	.056	.057	.058	.059	.060	.061	.062	.063	.064	.065	52

VIII.—BAROMETER TO FREEZING. ENGLISH.

Inches.

F.	26.	26.5	27.	27.5	28.	28.5	29.	29.5	30.	30.5	31.	F.
						SUBTRACT.						
52°	.055	.056	.057	.058	.059	.060	.061	.062	.063	.064	.065	52°
52.5	.056	.057	.058	.059	.060	.061	.062	.063	.064	.065	.066	52.5
53	.057	.058	.059	.060	.061	.063	.064	.065	.066	.067	.068	53
53.5	.058	.059	.060	.061	.063	.064	.065	.066	.067	.068	.069	53.5
54	.059	.060	.062	.063	.064	.065	.066	.067	.068	.070	.071	54
54.5	.060	.062	.063	.064	.065	.066	.068	.069	.070	.071	.072	54.5
55	.062	.063	.064	.065	.066	.068	.069	.070	.071	.072	.073	55
55.5	.063	.064	.065	.066	.068	.069	.070	.071	.072	.073	.075	55.5
56	.064	.065	.066	.068	.069	.070	.071	.073	.074	.075	.076	56
56.5	.065	.066	.068	.069	.070	.071	.073	.074	.075	.076	.077	56.5
57	.066	.068	.069	.070	.071	.073	.074	.075	.076	.078	.079	57
57.5	.068	.069	.070	.071	.073	.074	.075	.077	.078	.079	.080	57.5
58	.069	.070	.071	.073	.074	.075	.077	.078	.079	.081	.082	58
58.5	.070	.071	.072	.074	.075	.077	.078	.079	.081	.082	.083	58.5
59	.071	.072	.074	.075	.076	.078	.079	.080	.082	.083	.085	59
59.5	.072	.074	.075	.076	.078	.079	.080	.082	.083	.085	.086	59.5
60	.073	.075	.076	.077	.079	.080	.082	.083	.085	.086	.087	60
60.5	.074	.076	.077	.079	.080	.081	.083	.084	.086	.087	.089	60.5
61	.075	.077	.078	.080	.081	.083	.084	.086	.087	.089	.090	61
61.5	.077	.078	.080	.081	.083	.084	.086	.087	.089	.090	.091	61 5
62	.078	.079	.081	.082	.084	.085	.087	.088	.090	.091	.093	62
62.5	.079	.081	.082	.084	.085	.086	.088	.090	.091	.093	.094	62.5
63	.080	.082	.083	.085	.086	.088	.089	.091	.093	.094	.096	63
63.5	.081	.083	.085	.086	.088	.089	.091	.092	.094	.096	.097	63.5
64	.082	.084	.086	.087	.089	.090	.092	.094	.095	.097	.098	64
64.5	.084	.085	.087	.088	.090	.092	.093	.095	.097	.098	.100	64.5
65	.085	.086	.088	.090	.091	.093	.095	.096	.098	.100	.101	65
65.5	.086	.088	.089	.091	.093	.094	.096	.098	.099	.101	.103	65.5
66	.087	.089	.090	.092	.094	.096	.097	.099	.101	.102	.104	66
66.5	.088	.090	.092	.093	.095	.097	.099	.100	.102	.104	.105	66.5
67	.089	.091	.093	.095	.096	.098	.100	.102	.103	.105	.107	67
67.5	.091	.092	.094	.096	.098	.099	.101	.103	.105	.106	.108	67.5
68	.092	.094	.095	.097	.099	.101	.102	.104	.106	.108	.109	68
68.5	.093	.095	.097	.098	.100	.102	.104	.105	.107	.109	.110	68.5
69	.094	.096	.098	.100	.101	.103	.105	.107	.109	.110	.112	69
69.5	.095	.097	.099	.101	.103	.105	.106	.108	.110	.111	.113	69.5
70	.096	.098	.100	.102	.104	.106	.108	.109	.111	.113	.115	70
70.5	.098	.099	.101	.103	.105	.107	.109	.111	.112	.114	.116	70.5
71	.099	.101	.102	.104	.106	.108	.110	.112	.114	.116	.118	71
71.5	.100	.102	.104	.106	.108	.110	.111	.113	.115	.117	.119	71.5
72	.101	.103	.105	.107	.109	.111	.113	.115	.117	.119	.120	72
72.5	.102	.104	.106	.108	.110	.112	.114	.116	.118	.120	.122	72.5
73	.103	.105	.107	.109	.111	.113	.115	.117	.119	.121	.123	73
73.5	.105	.107	.109	.110	.113	.115	.117	.119	.121	.123	.125	73.5
74	.106	.108	.110	.112	.114	.116	.118	.120	.122	.124	.126	74
74.5	.107	.109	.111	.113	.115	.117	.119	.121	.123	.125	.128	74.5
75	.108	.110	.112	.114	.116	.118	.120	.122	.125	.127	.129	75
75.5	.109	.111	.113	.115	.118	.120	.122	.124	.126	.128	.130	75.5
76	.110	.112	.114	.117	.119	.121	.123	.125	.127	.129	.131	76

VIII.—BAROMETER TO FREEZING. ENGLISH.

Inches.

F.	26.	26.5	27.	27.5	28.	28.5	29.	29.5	30.	30.5	31.	F.
						SUBTRACT.						
76°	.110	.112	.114	.117	.119	.121	.123	.125	.127	.129	.131	76°
76.5	.111	.113	.116	.118	.120	.122	.124	.126	.128	.131	.133	76.5
77	.112	.115	.117	.119	.121	.123	.126	.128	.130	.132	.134	77
77.5	.114	.116	.118	.120	.123	.125	.127	.129	.131	.134	.136	77.5
78	.115	.117	.119	.122	.124	.126	.128	.130	.133	.135	.137	78
78.5	.116	.118	.120	.123	.125	.127	.129	.132	.134	.136	.138	78.5
79	.117	.119	.122	.124	.126	.128	.131	.133	.135	.137	.140	79
79.5	.118	.120	.123	.125	.128	.130	.132	.134	.137	.139	.141	79.5
80	.119	.122	.124	.126	.129	.131	.133	.136	.138	.140	.143	80
80.5	.121	.123	.125	.128	.130	.132	.135	.137	.139	.142	.144	80.5
81	.122	.124	.126	.129	.131	.134	.136	.138	.141	.143	.145	81
81 5	.123	.125	.128	.130	.133	.135	.137	.139	.142	.144	.147	81.5
82	.124	.126	.129	.131	.134	.136	.138	.141	.143	.146	.148	82
82.5	.125	.127	.130	.132	.135	.137	.140	.142	.145	.147	.149	82.5
83	.126	.129	.131	.134	.136	.139	.141	.143	.146	.148	.151	83
83.5	.128	.130	.133	.135	.138	.140	.142	.145	.147	.150	.152	83.5
84	.129	.131	.134	.136	.139	.141	.144	.146	.149	.151	.154	84
84.5	.130	.132	.135	.137	.140	.142	.145	.147	.150	.152	.155	84.5
85	.131	.134	.136	.139	.141	.144	.146	.149	.151	.154	.156	85
85.5	.132	.135	.137	.140	.142	.145	.147	.150	.153	.155	.158	85.5
86	.133	.136	.138	.141	.144	.146	.149	.151	.154	.156	.159	86
86.5	.135	.137	.140	.143	.145	.148	.150	.153	.155	.158	.161	86.5
87	.136	.138	.141	.143	.146	.149	.151	.154	.157	.159	.162	87
87.5	.137	.140	.142	.145	.147	.150	.153	.155	.158	.161	.164	87.5
88	.138	.141	.143	.146	.149	.151	.154	.157	.159	.162	.165	88
88.5	.139	.142	.144	.147	.150	.153	.155	.158	.161	.163	.166	88.5
89	.140	.143	.146	.148	.151	.154	.156	.159	.162	.165	.167	89
89.5	.141	.144	.147	.149	.152	.155	.158	.160	.163	.166	.168	89.5
90	.142	.145	.148	.151	.153	.156	.159	.162	.164	.167	.170	90
90.5	.144	.146	.149	.152	.155	.158	.160	.163	.166	.168	.171	90.5
91	.145	.148	.151	.153	.156	.159	.162	.165	.167	.170	.173	91
91.5	.146	.149	.152	.154	.157	.160	.163	.166	.168	.171	.174	91.5
92	.147	.150	.153	.156	.158	.161	.164	.167	.170	.172	.175	92
92.5	.148	.151	.154	.157	.159	.162	.165	.168	.171	.174	.177	92.5
93	.149	.152	.155	.158	.161	.164	.167	.170	.172	.175	.178	93
93.5	.150	.153	.156	.159	.162	.165	.168	.171	.174	.176	.179	93.5
94	.152	.155	.158	.161	.163	.166	.169	.172	.175	.177	.180	94
94.5	.153	.156	.159	.162	.164	.167	.170	.173	.176	.179	.182	94.5
95	.154	.157	.160	.163	.166	.169	.172	.175	.178	.180	.183	95
95.5	.155	.158	.161	.164	.167	.170	.173	.176	.179	.182	.185	95.5
96	.156	.159	.162	.165	.168	.171	.174	.177	.180	.183	.186	96
96.5	.157	.160	.163	.166	.169	.172	.175	.178	.181	.184	.187	96.5
97	.159	.162	.165	.168	.171	.174	.177	.180	.183	.186	.189	97
97.5	.160	.163	.166	.169	.172	.175	.178	.181	.184	.187	.190	97.5
98	.161	.164	.167	.170	.173	.176	.179	.182	.185	.188	.191	98
98.5	.162	.165	.168	.171	.175	.178	.181	.184	.187	.190	.193	98.5
99	.163	.166	.169	.173	.176	.179	.182	.185	.188	.191	.194	99
99.5	.164	.167	.171	.174	.177	.180	.183	.186	.189	.192	.195	99.5
100	.165	.169	.172	.175	.178	.181	.184	.188	.191	.194	.197	100

TABLE IX.—REDUCTION OF BAROMETER READINGS TO FREEZING. METRICAL.

(Jelínek and Hann. Anleitung z. met. Beob: Wien, 1884, p. 116.)

Millimetres.

C.	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	C.
									ADD.								
°−10	.66	.67	.69	.70	.72	.74	.75	.77	.79	.80	.82	.84	.85	.87	.88	.90	−10
− 9	.59	.60	.62	.63	.65	.66	.68	.69	.71	.72	.74	.75	.77	.78	.80	.81	− 9
− 8	.52	.54	.55	.56	.58	.59	.60	.62	.63	.64	.66	.67	.68	.69	.71	.72	− 8
− 7	.46	.47	.48	.49	.50	.52	.53	.54	.55	.56	.57	.58	.60	.61	.62	.63	− 7
− 6	.39	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50	.51	.52	.53	.54	− 6
− 5	.33	.34	.34	.35	.36	.37	.38	.38	.39	.40	.41	.42	.43	.43	.44	.45	− 5
− 4	.26	.27	.27	28	.29	.29	.30	.31	.31	.32	.33	.33	.34	.35	.35	.36	− 4
− 3	.20	.20	.21	.21	.22	.22	.23	.23	.24	.24	.25	.25	.26	.26	.27	.27	− 3
− 2	.13	.13	.14	.14	.14	.15	.15	.15	.16	.16	.16	.17	.17	.17	.18	.18	− 2
− 1	.07	.07	.07	.07	.07	.07	.08	.08	.08	.08	.08	.08	.09	.09	.09	.09	− 1
									SUBTRACT.								
0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
1	.07	.07	.07	.07	.07	.07	.08	.08	.08	.08	.08	.08	.09	.09	.09	.09	1
2	.13	.13	.14	.14	.14	.15	.15	.15	.16	.16	.16	.17	.17	.17	.18	.18	2
3	.20	.20	.21	.21	.22	.22	.23	.23	.24	.24	.25	.25	.26	.26	.27	.27	3
4	.26	.27	.27	.28	.29	.29	.30	.31	.31	.32	.33	.33	.34	.35	.35	.36	4
5	.33	.33	.34	.35	.36	.37	.38	.38	.39	.40	.41	.42	.42	.43	.44	.45	5
6	.39	.40	.41	.42	.43	.44	.45	.46	.47	.48	.49	.50	.51	.52	.53	54	6
7	.46	.47	.48	.49	.50	.51	.53	.54	.55	.56	.57	.58	.59	.61	.62	.63	7
8	.52	.54	.55	.56	.57	.59	.60	.61	.63	.64	.65	.67	.68	.69	.71	.72	8
9	.59	.60	.62	.63	.65	.66	.68	.69	.71	.72	.73	.75	.76	.78	.79	.81	9
10	.65	.67	.69	.70	.72	.73	.75	.77	.78	.80	.82	.83	.85	.86	.88	.90	10
11	.72	.74	.75	.77	.79	.81	.83	.84	.86	.88	.90	.92	.93	.95	.97	.99	11
12	.77	.80	.82	.84	.86	.88	.90	.92	.94	.96	.98	1.00	1.02	1.04	1.06	1.08	12
13	.85	.87	.89	.91	.93	.95	.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.15	1.17	13
14	.91	.94	.96	.98	1.00	1.03	1.05	1.07	1.10	1.12	1.14	1.16	1.19	1.21	1.23	1.26	14
15	.98	1.00	1.03	1.05	1.08	1.10	1.13	1.15	1.17	1.20	1.22	1.25	1.27	1.30	1.32	1.35	15
16	1.04	1.07	1.10	1.12	1.15	1.17	1.20	1.23	1.25	1.28	1.30	1.33	1.36	1.38	1.41	1.43	16
17	1.11	1.14	1.16	1.19	1.22	1.25	1.27	1.30	1.33	1.36	1.39	1.41	1.44	1.47	1.50	1.52	17
18	1.17	1.20	1.23	1.26	1.29	1.32	1.35	1.38	1.41	1.44	1.47	1.50	1.53	1.56	1.58	1.61	18
19	1.24	1.27	1.30	1.33	1.36	1.39	1.42	1.46	1.49	1.52	1.55	1.58	1.61	1.64	1.67	1.70	19
20	1.30	1.34	1.37	1.40	1.43	1.47	1.50	1.53	1.56	1.60	1.63	1.66	1.69	1.73	1.76	1.79	20
21	1.37	1.40	1.44	1.47	1.51	1.54	1.57	1.61	1.64	1.68	1.71	1.74	1.78	1.81	1.85	1.88	21
22	1.43	1.47	1.50	1.54	1.57	1.61	1.65	1.68	1.72	1.76	1.79	1.83	1.86	1.90	1.93	1.97	22
23	1.50	1.54	1.57	1.61	1.65	1.69	1.72	1.76	1.80	1.84	1.87	1.91	1.95	1.98	2.02	2.06	23
24	1.56	1.60	1.64	1.68	1.72	1.76	1.80	1.84	1.88	1.91	1.95	1.99	2.03	2.07	2.11	2.15	24
25	1.63	1.67	1.71	1.75	1.79	1.83	1.87	1.91	1.95	1.99	2.03	2.08	2.12	2.16	2.20	2.24	25
26	1.69	1.73	1.78	1.82	1.86	1.90	1.95	1.99	2.03	2.07	2.12	2.16	2.20	2.24	2.29	2.33	26
27	1.76	1.80	1.85	1.89	1.93	1.98	2.02	2.06	2.11	2.15	2.20	2.24	2.28	2.33	2.37	2.42	27
28	1.82	1.87	1.91	1.96	2.00	2.05	2.10	2.14	2.19	2.23	2.28	2.32	2.37	2.41	2.46	2.51	28
29	1.89	1.93	1.98	2.03	2.08	2.12	2.17	2.22	2.26	2.31	2.36	2.41	2.45	2.50	2.55	2.59	29
30	1.95	2.00	2.05	2.10	2.15	2.20	2.24	2.29	2.34	2.39	2.44	2.49	2.54	2.59	2.63	2.68	30
31	2.02	2.07	2.12	2.17	2.22	2.27	2.32	2.37	2.42	2.47	2.52	2.57	2.62	2.67	2.72	2.77	31
32	2.08	2.13	2.18	2.24	2.29	2.34	2.39	2.44	2.50	2.55	2.60	2.65	2.71	2.76	2.81	2.86	32
33	2.15	2.20	2.25	2.31	2.36	2.41	2.47	2 52	2.57	2.63	2.68	2.74	2.79	2.84	2.90	2.95	33
34	2.21	2.27	2.32	2.38	2.43	2.49	2.54	2.60	2.65	2.71	2.76	2.82	2.87	2.93	2.98	3.04	34
35	2.27	2.33	2.39	2.45	2.50	2.56	2.62	2.67	2.73	2.79	2.84	2.90	2.96	3.01	3.07	3.13	35

IX.—BAROMETER TO FREEZING. METRICAL.

Millimetres.

C.	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	C.
									ADD.								
-10	0.90	.92	.93	.95	.97	.98	1.00	1.02	1.03	1.05	1.06	1.08	1.10	1.11	1.13	1.15	-10
- 9	.81	.83	.84	.85	.87	.88	.90	.91	.93	.94	.96	.97	.99	1.00	1.01	1.03	- 9
- 8	.72	.73	.75	.76	.77	.79	.80	.81	.83	.84	.85	.86	.88	.89	.90	.92	- 8
- 7	.63	.64	.65	.66	.68	.69	.70	.71	.72	.73	.74	.76	.77	.78	.79	.80	- 7
- 6	.54	.55	.56	.57	.58	.59	.60	.61	.62	.63	.64	.65	.66	.67	.68	.69	- 6
- 5	.45	.46	.47	.47	.48	.49	.50	.51	.52	.52	.53	.54	.55	.56	.56	.57	- 5
- 4	.36	.37	.37	.38	.39	.39	.40	.41	.41	.42	.43	.43	.44	.45	.45	.46	- 4
- 3	.27	.27	.28	.28	.29	.29	.30	.30	.31	.31	.32	.32	.33	.33	.34	.34	- 3
- 2	.18	.18	.19	.19	.19	.20	.20	.20	.21	.21	.21	.22	.22	.22	.23	.23	- 2
- 1	.09	.09	.09	.10	.10	.10	.10	.10	.10	.10	.11	.11	.11	.11	.11	.11	- 1
									SUBTRACT.								
0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
1	.09	.09	.09	.10	.10	.10	.10	.10	.10	.10	.11	.11	.11	.11	.11	.11	1
2	.18	.18	.19	.19	.19	.20	.20	.20	.21	.21	.21	.22	.22	.22	.23	.23	2
3	.27	.27	.28	.28	.29	.29	.30	.30	.31	.31	.32	.32	.33	.33	.34	.34	3
4	.36	.37	.37	.38	.39	.39	.40	.41	.41	.42	.43	.43	.44	.44	.45	.46	4
5	.45	.46	.47	.47	.48	.49	.50	.51	.51	.52	.53	.54	.55	.56	.56	.57	5
6	.54	.55	.56	.57	.58	.59	.60	.61	.62	.63	.64	.65	.66	.67	.68	.69	6
7	.63	.64	.65	.66	.67	.68	.70	.71	.72	.73	.74	.75	.77	.78	.79	.80	7
8	.72	.73	.74	.76	.77	.78	.80	.81	.82	.84	.85	.86	.88	.89	.90	.91	8
9	.81	.82	.84	.85	.87	.88	.90	.91	.93	.94	.95	.97	.98	1.00	1.01	1.03	9
10	.90	.91	.93	.95	.96	.98	1.00	1.01	1.03	1.04	1.06	1.08	1.09	1.11	1.13	1.14	10
11	.99	1.01	1.02	1.04	1.06	1.08	1.09	1.11	1.13	1.15	1.17	1.18	1.20	1.22	1.24	1.26	11
12	1.08	1.10	1.12	1.14	1.16	1.17	1.19	1.21	1.23	1.25	1.27	1.29	1.31	1.33	1.35	1.37	12
13	1.17	1.19	1.21	1.23	1.25	1.27	1.29	1.31	1.34	1.36	1.38	1.40	1.42	1.44	1.46	1.48	13
14	1.26	1.28	1.30	1.32	1.35	1.37	1.39	1.42	1.44	1.46	1.48	1.51	1.53	1.55	1.58	1.60	14
15	1.35	1.37	1.39	1.42	1.44	1.47	1.49	1.52	1.54	1.57	1.59	1.61	1.63	1.66	1.69	1.71	15
16	1.43	1.46	1.49	1.51	1.54	1.57	1.59	1.62	1.64	1.67	1.70	1.72	1.75	1.77	1.80	1.83	16
17	1.52	1.55	1.58	1.61	1.63	1.66	1.69	1.72	1.75	1.77	1.80	1.83	1.86	1.88	1.91	1.94	17
18	1.61	1.64	1.67	1.70	1.73	1.76	1.79	1.82	1.85	1.88	1.91	1.94	1.97	2.00	2.02	2.05	18
19	1.70	1.73	1.76	1.79	1.83	1.86	1.89	1.92	1.95	1.98	2.01	2.04	2.07	2.11	2.14	2.17	19
20	1.79	1.83	1.86	1.89	1.92	1.96	1.99	2.02	2.05	2.09	2.12	2.15	2.18	2.22	2.25	2.28	20
21	1.88	1.92	1.95	1.98	2.02	2.05	2.09	2.12	2.16	2.19	2.22	2.26	2.29	2.33	2.36	2.39	21
22	1.97	2.01	2.04	2.08	2.11	2.15	2.19	2.22	2.26	2.29	2.33	2.36	2.40	2.44	2.47	2.51	22
23	2.06	2.10	2.13	2.17	2.21	2.25	2.28	2.32	2.36	2.40	2.43	2.47	2.51	2.55	2.58	2.62	23
24	2.15	2.19	2.23	2.27	2.31	2.34	2.38	2.42	2.46	2.50	2.54	2.58	2.62	2.66	2.70	2.73	24
25	2.24	2.28	2.32	2.36	2.40	2.44	2.48	2.52	2.56	2.60	2.65	2.69	2.73	2.77	2.81	2.85	25
26	2.33	2.37	2.41	2.45	2.50	2.54	2.58	2.62	2.67	2.71	2.75	2.79	2.84	2.88	2.92	2.96	26
27	2.42	2.46	2.50	2.55	2.59	2.64	2.68	2.72	2.77	2.81	2.86	2.90	2.94	2.99	3.03	3.08	27
28	2.51	2.55	2.60	2.64	2.69	2.73	2.78	2.82	2.87	2.92	2.96	3.01	3.05	3.10	3.14	3.19	28
29	2.59	2.64	2.69	2.74	2.78	2.83	2.88	2.92	2.97	3.02	3.07	3.11	3.16	3.21	3.25	3.30	29
30	2.68	2.73	2.78	2.83	2.88	2.93	2.98	3.02	3.07	3.12	3.17	3.22	3.27	3.32	3.37	3.42	30
31	2.77	2.82	2.87	2.92	2.97	3.02	3.08	3.13	3.18	3.23	3.28	3.33	3.38	3.43	3.48	3.53	31
32	2.86	2.91	2.97	3.02	3.07	3.12	3.17	3.23	3.28	3.33	3.38	3.43	3.49	3.54	3.59	3.64	32
33	2.95	3.00	3.06	3.11	3.16	3.22	3.27	3.33	3.38	3.43	3.49	3.54	3.59	3.65	3.70	3.75	33
34	3.04	3.09	3.15	3.20	3.26	3.32	3.37	3.43	3.48	3.54	3.59	3.65	3.70	3.76	3.81	3.87	34
35	3.13	3.18	3.24	3.30	3.36	3.41	3.47	3.53	3.58	3.64	3.70	3.75	3.81	3.87	3.92	3.98	35

IX.—BAROMETER TO FREEZING. METRICAL.

Millimetres.

C.	700	710	720	730	740	750	760	770	780	790	C.
					ADD.						
−10	1.15	1.16	1.18	1.20	1.21	1.23	1.25	1.26	1.28	1.29	−10
− 9.5	1.09	1.10	1.12	1.14	1.15	1.17	1.18	1.20	1.21	1.23	− 9.5
− 9	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.13	1.15	1.16	− 9
− 8.5	.97	.99	1.00	1.02	1.03	1.05	1.06	1.07	1.08	1.09	− 8.5
− 8	.92	.93	.94	.96	.97	.98	1.00	1.01	1.02	1.03	− 8
− 7.5	.86	.87	.88	.90	.91	.92	.93	.94	.96	.97	− 7.5
− 7	.80	.81	.83	.84	.85	.86	.87	.88	.89	.91	− 7
− 6.5	.75	.76	.77	.78	.79	.80	.81	.82	.83	.84	− 6.5
− 6	.69	.70	.71	.72	.73	.74	.75	.76	.77	.78	− 6
− 5.5	.63	.64	.65	.66	.67	.67	.68	.69	.70	.71	− 5.5
− 5	.57	.58	.59	.60	.61	.61	.62	.63	.64	.65	− 5
− 4.5	.52	.52	.53	.54	.55	.55	.56	.57	.58	.58	− 4.5
− 4	.46	.47	.47	.48	.48	.49	.50	.50	.51	.52	− 4
− 3.5	.40	.41	.41	.42	.42	.43	.44	.44	.45	.45	− 3.5
− 3	.34	.35	.35	.36	.36	.37	.37	.38	.38	.39	− 3
− 2.5	.28	.29	.29	.30	.30	.31	.31	.32	.32	.33	− 2.5
− 2	.23	.23	.24	.24	.24	.25	.25	.25	.26	.26	− 2
− 1.5	.17	.18	.18	.18	.18	.18	.19	.19	.19	.20	− 1.5
− 1	.11	.12	.12	.12	.12	.12	.12	.13	.13	.13	− 1
− 0.5	.06	.06	.06	.06	.06	.06	.06	.06	.07	.07	− 0.5
					SUBTRACT.						
0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	0
0.5	.06	.06	.06	.06	.06	.06	.06	.06	.07	.07	0.5
1	.11	.12	.12	.12	.12	.12	.12	.13	.13	.13	1
1.5	.17	.18	.18	.18	.18	.18	.19	.19	.19	.20	1.5
2	.23	.23	.24	.24	.24	.25	.25	.25	.26	.26	2
2.5	.28	.29	.29	.30	.30	.31	.31	.32	.32	.33	2.5
3	.34	.35	.35	.36	.36	.37	.37	.38	.38	.39	3
3.5	.40	.41	.41	.42	.42	.43	.43	.44	.45	.45	3.5
4	.46	.46	.47	.48	.48	.49	.50	.50	.51	.52	4
4.5	.52	.52	.53	.54	.54	.55	.56	.57	.57	.58	4.5
5	.57	.58	.59	.60	.60	.61	.62	.63	.64	.65	5
5.5	.63	.64	.65	.66	.67	.67	.68	.69	.70	.71	5.5
6	.69	.70	.71	.72	.73	.74	.74	.75	.76	.77	6
6.5	.75	.76	.77	.78	.79	.80	.81	.82	.83	.84	6.5
7	.80	.81	.82	.83	.85	.86	.87	.88	.89	.90	7
7.5	.85	.87	.88	.89	.91	.92	.93	.94	.95	.96	7.5
8	.91	.93	.94	.95	.97	.98	.99	1.01	1.02	1.03	8
8.5	.97	.99	1.00	1.01	1.03	1.04	1.06	1.07	1.08	1.09	8.5
9	1.03	1.04	1.06	1.07	1.09	1.10	1.12	1.13	1.14	1.16	9
9.5	1.09	1.10	1.12	1.13	1.15	1.16	1.18	1.19	1.21	1.22	9.5
10	1.14	1.16	1.18	1.19	1.21	1.22	1.24	1.26	1.27	1.29	10
10.5	1.20	1.22	1.23	1.25	1.27	1.29	1.30	1.32	1.34	1.36	10.5
11	1.26	1.27	1.29	1.31	1.33	1.35	1.36	1.38	1.40	1.42	11
11.5	1.31	1.33	1.35	1.37	1.39	1.41	1.43	1.45	1.47	1.49	11.5
12	1.37	1.39	1.41	1.43	1.45	1.47	1.49	1.51	1.53	1.55	12
12.5	1.43	1.45	1.47	1.49	1.51	1.53	1.55	1.57	1.59	1.61	12.5
13	1.48	1.50	1.53	1.55	1.57	1.59	1.61	1.63	1.65	1.68	13
13.5	1.54	1.56	1.58	1.61	1.63	1.65	1.67	1.69	1.72	1.74	13.5
14	1.60	1.62	1.64	1.67	1.69	1.71	1.73	1.76	1.78	1.80	14
14.5	1.65	1.68	1.70	1.73	1.75	1.77	1.80	1.82	1.84	1.87	14.5
15	1.71	1.74	1.76	1.79	1.81	1.83	1.86	1.88	1.91	1.93	15

IX.—BAROMETER TO FREEZING. METRICAL.

Millimetres.

C.	700	710	720	730	740	750	760	770	780	790	C.
						SUBTRACT.					
15°	1.71	1.74	1.76	1.79	1.81	1.83	1.86	1.88	1.91	1.93	15°
15.5	1.77	1.79	1.82	1.84	1.87	1.89	1.92	1.95	1.97	2.00	15.5
16	1.83	1.85	1.88	1.90	1.93	1.96	1.98	2.01	2.04	2.06	16
16.5	1.88	1.91	1.94	1.96	1.99	2.02	2.04	2.07	2.10	2.13	16.5
17	1.94	1.97	2.00	2.02	2.05	2.08	2.11	2.13	2.16	2.19	17
17.5	2.01	2.03	2.06	2.08	2.11	2.14	2.17	2.20	2.23	2.26	17.5
18	2.05	2.08	2.11	2.14	2.17	2.20	2.23	2.26	2.29	2.32	18
18.5	2.11	2.14	2.17	2.20	2.23	2.26	2.29	2.32	2.35	2.38	18.5
19	2.17	2.20	2.23	2.26	2.29	2.32	2.35	2.38	2.41	2.45	19
19.5	2.23	2.26	2.29	2.32	2.35	2.38	2.41	2.45	2.48	2.51	19.5
20	2.28	2.31	2.35	2.38	2.41	2.44	2.48	2.51	2.54	2.57	20
20.5	2.34	2.37	2.40	2.44	2.47	2.50	2.54	2.57	2.60	2.64	20.5
21	2.39	2.43	2.46	2.50	2.53	2.57	2.60	2.63	2.67	2.70	21
21.5	2.45	2.48	2.52	2.56	2.59	2.63	2.66	2.69	2.73	2.76	21.5
22	2.51	2.54	2.58	2.62	2.65	2.69	2.72	2.76	2.79	2.83	22
22.5	2.57	2.60	2.64	2.67	2.71	2.75	2.78	2.82	2.86	2.89	22.5
23	2.62	2.66	2.70	2.73	2.77	2.81	2.85	2.88	2.92	2.96	23
23.5	2.68	2.72	2.75	2.79	2.83	2.87	2.91	2.95	2.98	3.02	23.5
24	2.73	2.77	2.81	2.85	2.89	2.93	2.97	3.01	3.05	3.09	24
24.5	2.79	2.83	2.87	2.91	2.95	2.99	3.03	3.07	3.11	3.15	24.5
25	2.85	2.89	2.93	2.97	3.01	3.05	3.09	3.13	3.17	3.21	25
25.5	2.91	2.95	2.99	3.03	3.07	3.11	3.15	3.19	3.23	3.28	25.5
26	2.96	3.00	3.05	3.09	3.13	3.17	3.22	3.26	3.30	3.34	26
26.5	3.02	3.06	3.11	3.15	3.19	3.23	3.28	3.32	3.36	3.41	26.5
27	3.08	3.12	3.16	3.21	3.25	3.29	3.34	3.38	3.43	3.47	27
27.5	3.13	3.18	3.22	3.27	3.31	3.36	3.40	3.44	3.49	3.53	27.5
28	3.19	3.23	3.28	3.33	3.37	3.42	3.46	3.51	3.55	3.60	28
28.5	3.24	3.29	3.34	3.39	3.43	3.48	3.52	3.57	3.62	3.66	28.5
29	3.30	3.35	3.40	3.44	3.49	3.54	3.58	3.63	3.68	3.73	29
29.5	3.36	3.40	3.45	3.50	3.55	3.60	3.65	3.69	3.74	3.79	29.5
30	3.42	3.46	3.51	3.56	3.61	3.66	3.71	3.76	3.81	3.85	30
30.5	3.47	3.52	3.57	3.62	3.67	3.72	3.77	3.82	3.87	3.93	30.5
31	3.53	3.58	3.63	3.68	3.73	3.78	3.83	3.88	3.93	3.98	31
31.5	3.58	3.64	3.69	3.74	3.79	3.84	3.89	3.94	3.99	4.05	31.5
32	3.64	3.69	3.75	3.80	3.85	3.90	3.95	4.00	4.06	4.11	32
32.5	3.69	3.75	3.80	3.86	3.91	3.96	4.01	4.07	4.12	4.17	32.5
33	3.75	3.81	3.86	3.92	3.97	4.02	4.08	4.13	4.18	4.24	33
33.5	3.81	3.87	3.92	3.97	4.03	4.08	4.14	4.19	4.25	4.30	33.5
34	3.87	3.92	3.98	4.03	4.09	4.14	4.20	4.25	4.31	4.36	34
34.5	3.92	3.98	4.04	4.09	4.15	4.20	4.26	4.32	4.37	4.43	34.5
35	3.98	4.04	4.09	4.15	4.21	4.27	4.32	4.38	4.44	4.49	35

TABLES X TO XIV.

BAROMETRIC HYPSOMETRY AND REDUCTION TO SEA-LEVEL.

INTRODUCTION.

Barometric Hypsometry.

Many formulæ and tables have been devised for computing heights from barometric observations, and, conversely, for reducing barometer readings to sea-level, but nearly all are based on the formula of Laplace, published in 1805.[1]

The complete formula includes a term dependent on the hygrometric conditions of the air column, but the use of this term is unsatisfactory, since we do not know the exact vertical distribution of moisture. Moreover, experience seems to indicate that this term will often introduce an error. For example, in the case of Mt. Washington, the full formula, as developed by Professor Ferrel, gives a height of 6,326 feet, computed from the mean of several years' observations, while the true height is 6,279 feet; of this error of 47 feet, at least 20 feet is due to the use of a term depending on the moisture. This term was ignored by Professor Guyot, and the International Meteorological Committee has recently decided to omit it in their tables, about to be issued.

The formula selected for the English tables was that of Professor Ferrel;[2] the form of table is that of Angot,[3] which has been found by far the most concise and convenient yet devised. The formula is:

$$H = 60521\,(1 + .001017) \times 36 \times \log.\frac{30}{P} + H'\left\{1 + .001017\,(t' + t - 100)\right\} + H''\,(1 + .002606\ \text{Cos.}\ 2\,\Phi).$$

[1] Mécanique Celeste IV, Paris, 1805, p. 289.

[2] Met. researches, iii. Washington, 1882, p. 22.

[3] Ann. Soc. Met. France, Paris. 1880, xxviii, 202.

The three tables for the different parts of the formula need no explanation.

EXAMPLE.

Mt. Washington, $P = 23''.61 : t = 25°$	
Base ..... $P = 29.97 : t' = 45°$	
$\Phi = 44° 16'$	
From Part 1, argument 23.61, we have	6526
" " " " 29.97, "	27
H' =	6499
From Part 2, argument $t' + t - 100$ and 6500, we have	−198
H'' =	6301
" " 3, argument 44° "	1
" 4 " 6000'	2
Final height	6304 feet.

METRICAL.

For the metrical tables, those of Angot are copied, with the single omission of the part relating to the moisture contents of the air column.

REDUCTION TO SEA-LEVEL.

The above remarks relative to vapor pressure apply as well to these tables. A strict application of the formula requires a correction for the observed pressure, but experience has shown that, assuming the mean temperature of the air column to be the mean of that at the base and summit, the correction for observed pressure vanishes.[1]

If a gravity correction be desired, it may readily be found by Table XIV. In practice, it will be best to draw up a table for the single elevation of the station, and for each two degrees, if the height be above 1,000 feet. The temperature to be used is an approximate mean for the previous 24 hours. If observations are made at equal intervals three times each day, the mean of the three, including the current observation, is to be taken.

The metrical tables are computed in the same manner as the English.

[1]Am. Journ Sc., New Haven, 1881, XXI, 366; XXII, 3.

TABLE X.—DETERMINATION OF HEIGHT BY THE BAROMETER. ENGLISH.

PART I.

$A = 60521\,(1 + .001017) \times 36° \times \log. \frac{30}{B}$: Argument B

B.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	B.
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	
31.0	−893	−902	−911	−919	−928	−937	−945	−954	−963	−971	31.0
30.9	−805	−814	−823	−832	−841	−849	−858	−867	−876	−884	30.9
30.8	−717	−726	−735	−744	−753	−761	−770	−779	−788	−796	30.8
30.7	−629	−638	−647	−656	−665	−673	−682	−691	−700	−708	30.7
30.6	−540	−549	−558	−567	−576	−584	−593	−602	−611	−620	30.6
30.5	−451	−460	−469	−478	−487	−495	−504	−513	−522	−531	30.5
30.4	−361	−370	−379	−388	−397	−406	−415	−424	−433	−442	30.4
30.3	−271	−280	−289	−298	−307	−316	−325	−334	−343	−352	30.3
30.2	−181	−190	−199	−208	−217	−226	−235	−244	−253	−262	30.2
30.1	− 91	−100	−109	−118	−127	−136	−145	−154	−163	−172	30.1
30.0	0	− 9	− 18	− 27	− 36	− 46	− 55	− 64	− 73	− 82	30.0
	+	+	+	+	+	+	+	+	+	+	
29.9	91	82	73	64	55	46	36	27	18	9	29.9
29.8	182	173	164	155	146	137	127	118	109	100	29.8
29.7	274	265	255	246	237	228	218	209	200	191	29.7
29.6	366	357	347	338	329	320	310	301	292	283	29.6
29.5	458	448	439	430	421	412	402	393	384	375	29.5
29.4	550	540	531	522	513	504	494	485	476	467	29.4
29.3	643	633	624	615	606	596	587	578	568	559	29.3
29.2	736	726	717	708	699	689	680	671	661	652	29.2
29.1	830	820	811	801	792	783	773	764	755	745	29.1
29.0	924	914	905	895	886	876	867	858	848	839	29.0
28.9	1018	1008	999	989	980	971	961	952	943	933	28.9
28.8	1112	1102	1093	1084	1074	1065	1055	1046	1037	1027	28.8
28.7	1207	1197	1188	1178	1169	1159	1150	1140	1131	1121	28.7
28.6	1302	1292	1282	1273	1263	1254	1245	1235	1226	1216	28.6
28.5	1397	1387	1377	1368	1358	1349	1339	1330	1321	1311	28.5
28.4	1493	1483	1474	1464	1455	1445	1435	1425	1416	1406	28.4
28.3	1589	1579	1569	1559	1550	1541	1531	1521	1512	1502	28.3
28.2	1686	1676	1666	1656	1646	1636	1627	1617	1608	1598	28.2
28.1	1783	1773	1763	1753	1743	1734	1724	1715	1705	1695	28.1
28.0	1880	1870	1860	1850	1841	1831	1821	1811	1802	1792	28.0
27.9	1977	1967	1957	1947	1938	1928	1918	1908	1899	1889	27.9
27.8	2075	2065	2055	2045	2035	2025	2016	2006	1996	1986	27.8
27.7	2173	2163	2153	2143	2133	2123	2114	2104	2094	2084	27.7
27.6	2272	2262	2252	2242	2232	2222	2213	2203	2193	2183	27.6
27.5	2371	2361	2351	2341	2331	2321	2312	2302	2292	2282	27.5
27.4	2470	2460	2450	2440	2430	2420	2411	2401	2391	2381	27.4
27.3	2570	2560	2550	2540	2530	2520	2510	2500	2490	2480	27.3
27.2	2670	2660	2650	2640	2630	2620	2610	2600	2590	2580	27.2
27.1	2770	2760	2750	2740	2730	2720	2710	2700	2690	2680	27.1
27.0	2871	2861	2851	2841	2831	2821	2810	2800	2790	2780	27.0
26.9	2972	2962	2952	2942	2932	2922	2911	2901	2891	2881	26.9
26.8	3073	3063	3053	3043	3033	3023	3012	3002	2992	2982	26.8
26.7	3175	3164	3154	3144	3134	3124	3113	3103	3093	3083	26.7
26.6	3277	3266	3256	3246	3236	3226	3215	3205	3195	3185	26.6
26.5	3380	3370	3360	3349	3339	3329	3318	3308	3298	3287	26.5
26.4	3483	3472	3462	3452	3441	3431	3421	3411	3400	3390	26.4
26.3	3586	3575	3565	3555	3545	3534	3524	3514	3503	3493	26.3
26.2	3690	3679	3669	3658	3648	3638	3627	3617	3607	3596	26.2
26.1	3794	3783	3773	3762	3752	3742	3731	3721	3710	3700	26.1
26.0	3899	3888	3878	3867	3857	3846	3836	3825	3815	3804	26.0

X.—BAROMETRIC HEIGHTS. ENGLISH.

PART I

B.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	B.
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	
26.0	3899	3888	3878	3867	3857	3846	3836	3825	3815	3804	26.0
25.9	4004	3993	3983	3972	3962	3951	3941	3930	3920	3909	25.9
25.8	4109	4098	4088	4077	4067	4056	4046	4035	4025	4014	25.8
25.7	4215	4204	4193	4183	4172	4162	4151	4140	4130	4119	25.7
25.6	4321	4310	4300	4289	4278	4268	4257	4246	4236	4225	25.6
25.5	4428	4417	4406	4395	4385	4374	4363	4353	4342	4331	25.5
25.4	4535	4524	4514	4503	4492	4482	4471	4460	4449	4438	25.4
25.3	4643	4632	4621	4610	4600	4589	4578	4567	4556	4545	25.3
25.2	4751	4740	4729	4718	4708	4697	4686	4675	4664	4653	25.2
25.1	4859	4848	4837	4826	4815	4805	4794	4783	4772	4761	25.1
25.0	4968	4957	4946	4935	4924	4913	4903	4892	4881	4870	25.0
24.9	5077	5066	5055	5044	5033	5022	5012	5001	4990	4979	24.9
24.8	5186	5175	5164	5153	5142	5131	5121	5110	5099	5088	24.8
24.7	5296	5285	5274	5263	5252	5241	5230	5219	5208	5197	24.7
24.6	5407	5396	5385	5374	5363	5352	5340	5329	5318	5307	24.6
24.5	5518	5507	5496	5485	5474	5463	5451	5440	5429	5418	24.5
24.4	5629	5618	5607	5596	5585	5574	5562	5551	5540	5529	24.4
24.3	5741	5730	5719	5708	5696	5685	5674	5663	5651	5640	24.3
24.2	5854	5843	5831	5820	5809	5797	5786	5775	5763	5752	24.2
24.1	5967	5956	5944	5933	5922	5910	5899	5888	5876	5865	24.1
24.0	6080	6069	6057	6046	6035	6023	6012	6001	5989	5978	24.0
23.9	6194	6183	6171	6160	6148	6137	6125	6114	6103	6091	23.9
23.8	6308	6297	6285	6274	6262	6251	6239	6228	6217	6205	23.8
23.7	6423	6411	6400	6389	6377	6365	6354	6342	6331	6319	23.7
23.6	6538	6526	6515	6503	6492	6480	6469	6457	6446	6434	23.6
23.5	6654	6642	6630	6619	6607	6596	6584	6572	6561	6549	23.5
23.4	6770	6758	6746	6735	6723	6712	6700	6688	6677	6665	23.4
23.3	6887	6875	6863	6852	6840	6828	6816	6805	6793	6781	23.3
23.2	7004	6992	6980	6969	6957	6945	6933	6922	6910	6898	23.2
23.1	7121	7109	7097	7086	7074	7062	7050	7039	7027	7015	23.1
23.0	7239	7227	7215	7204	7192	7180	7168	7156	7144	7132	23.0
22.9	7358	7346	7334	7322	7310	7298	7286	7274	7262	7250	22.9
22.8	7477	7465	7453	7441	7429	7417	7405	7393	7381	7370	22.8
22.7	7597	7585	7573	7561	7549	7537	7525	7513	7501	7489	22.7
22.6	7717	7705	7693	7681	7669	7657	7645	7633	7621	7609	22.6
22.5	7838	7826	7814	7802	7790	7778	7765	7753	7741	7729	22.5
22.4	7960	7948	7935	7923	7911	7899	7887	7874	7862	7850	22.4
22.3	8082	8070	8058	8045	8033	8021	8009	7997	7984	7972	22.3
22.2	8204	8192	8180	8168	8155	8143	8131	8119	8107	8094	22.2
22.1	8327	8315	8302	8290	8278	8265	8253	8241	8228	8216	22.1
22.0	8451	8438	8425	8413	8401	8389	8376	8364	8352	8339	22.0
21.9	8575	8563	8550	8538	8526	8513	8501	8488	8476	8463	21.9
21.8	8700	8687	8675	8662	8650	8637	8625	8612	8600	8587	21.8
21.7	8825	8812	8800	8787	8775	8762	8750	8737	8725	8712	21.7
21.6	8951	8938	8926	8913	8900	8888	8875	8863	8850	8838	21.6
21.5	9077	9064	9051	9038	9025	9013	9001	8989	8976	8964	21.5
21.4	9204	9191	9179	9166	9153	9141	9128	9115	9102	9090	21.4
21.3	9332	9319	9306	9293	9280	9267	9254	9241	9228	9216	21.3
21.2	9460	9447	9434	9422	9409	9396	9383	9370	9357	9345	21.2
21.1	9589	9576	9563	9550	9537	9524	9512	9499	9486	9473	21.1
21.0	9718	9705	9692	9679	9666	9653	9641	9628	9615	9602	21.0

X.—BAROMETRIC HEIGHTS. ENGLISH.

PART I.

B.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	B.
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	
21.0	9718	9705	9692	9679	9666	9653	9641	9628	9615	9602	21.0
20.9	9848	9835	9822	9809	9796	9783	9770	9757	9744	9731	20.9
20.8	9979	9966	9953	9940	9927	9914	9901	9888	9874	9861	20.8
20.7	10110	10097	10084	10071	10058	10045	10032	10019	10005	9992	20.7
20.6	10242	10229	10216	10203	10190	10176	10163	10150	10137	10123	20.6
20.5	10375	10362	10349	10335	10322	10309	10295	10282	10269	10255	20.5
20.4	10508	10495	10482	10469	10455	10442	10428	10415	10402	10388	20.4
20.3	10642	10629	10616	10602	10589	10575	10562	10548	10535	10521	20.3
20.2	10776	10762	10749	10735	10722	10709	10696	10682	10669	10655	20.2
20.1	10911	10897	10884	10870	10857	10843	10830	10816	10803	10789	20.1
20.0	11047	11033	11019	11006	10992	10979	10965	10951	10938	10924	20.0
19.9	11184	11170	11156	11142	11128	11115	11101	11087	11074	11060	19.9
19.8	11321	11307	11293	11279	11265	11252	11238	11224	11211	11197	19.8
19.7	11459	11445	11431	11417	11404	11390	11376	11362	11349	11335	19.7
19.6	11598	11584	11571	11557	11543	11529	11515	11501	11487	11473	19.6
19.5	11737	11723	11709	11695	11681	11667	11654	11640	11626	11612	19.5
19.4	11877	11863	11849	11835	11821	11807	11793	11779	11765	11751	19.4
19.3	12018	12004	11990	11976	11962	11948	11933	11919	11905	11891	19.3
19.2	12160	12146	12132	12118	12103	12089	12075	12061	12046	12032	19.2
19.1	12302	12288	12274	12260	12245	12231	12217	12203	12188	12174	19.1
19.0	12445	12431	12417	12402	12388	12374	12359	12345	12331	12316	19.0
18.9	12589	12575	12560	12546	12531	12517	12503	12488	12474	12459	18.9
18.8	12733	12719	12704	12690	12675	12661	12647	12632	12618	12603	18.8
18.7	12879	12864	12849	12835	12820	12806	12791	12777	12762	12748	18.7
18.6	13025	13010	12995	12981	12967	12952	12937	12923	12908	12894	18.6
18.5	13171	13156	13142	13127	13113	13098	13083	13069	13054	13040	18.5
18.4	13319	13304	13289	13275	13260	13245	13230	13215	13201	13186	18.4
18.3	13468	13453	13438	13423	13408	13393	13378	13363	13348	13334	18.3
18.2	13617	13602	13587	13572	13557	13542	13527	13512	13497	13483	18.2
18.1	13767	13752	13737	13722	13707	13692	13677	13662	13647	13632	18.1
18.0	13918	13903	13888	13873	13857	13842	13827	13812	13797	13782	18.0
17.9	14070	14055	14040	14025	14009	13994	13979	13964	13949	13933	17.9
17.8	14223	14208	14192	14177	14161	14146	14131	14116	14101	14085	17.8
17.7	14377	14361	14346	14331	14315	14300	14285	14269	14254	14238	17.7
17.6	14531	14515	14500	14485	14469	14454	14438	14423	14408	14392	17.6
17.5	14686	14670	14655	14639	14624	14608	14592	14577	14562	14546	17.5
17.4	14842	14826	14811	14795	14780	14764	14749	14733	14717	14702	17.4
17.3	14999	14983	14967	14952	14936	14920	14904	14888	14873	14857	17.3
17.2	15157	15141	15125	15109	15093	15078	15062	15046	15030	15014	17.2
17.1	15316	15300	15284	15268	15252	15236	15220	15204	15188	15172	17.1
17.0	15476	15460	15444	15428	15412	15396	15380	15364	15348	15332	17.0
16.9	15636	15620	15604	15588	15572	15556	15540	15524	15508	15492	16.9
16.8	15798	15782	15766	15750	15734	15717	15701	15685	15669	15653	16.8
16.7	15960	15944	15928	15912	15896	15879	15863	15847	15831	15815	16.7
16.6	16124	16108	16091	16075	16059	16042	16026	16010	15993	15977	16.6
16.5	16288	16272	16255	16239	16223	16206	16190	16173	16157	16141	16.5
16.4	16454	16437	16420	16404	16387	16371	16354	16338	16321	16305	16.4
16.3	16621	16604	16587	16570	16553	16537	16520	16504	16487	16471	16.3
16.2	16789	16772	16755	16738	16721	16705	16688	16671	16654	16637	16.2
16.1	16957	16940	16923	16906	16889	16873	16856	16839	16822	16805	16.1
16.0	17127	17110	17093	17076	17059	17042	17025	17008	16991	16974	16.0

X.—BAROMETRIC HEIGHTS. ENGLISH.

PART I.

B.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09	B.
	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	
16.0	17127	17110	17093	17076	17059	17042	17025	17008	16991	16974	16.0
15.9	17298	17281	17264	17247	17230	17212	17195	17178	17161	17144	15.9
15.8	17470	17453	17436	17419	17402	17384	17367	17350	17333	17316	15.8
15.7	17643	17626	17608	17591	17574	17556	17539	17522	17505	17488	15.7
15.6	17817	17800	17782	17765	17748	17730	17713	17695	17678	17661	15.6
15.5	17992	17974	17957	17939	17922	17904	17887	17869	17852	17835	15.5
15.4	18168	18150	18133	18115	18097	18080	18062	18044	18027	18009	15.4
15.3	18346	18328	18310	18292	18274	18257	18239	18221	18203	18185	15.3
15.2	18525	18507	18489	18471	18453	18435	18417	18399	18381	18363	15.2
15.1	18705	18687	18669	18651	18633	18615	18597	18579	18561	18543	15.1
15.0	18886	18868	18850	18832	18814	18795	18777	18759	18741	18723	15.0
14.9	19068	19050	19032	19014	18996	18977	18959	18941	18923	18905	14.9
14.8	19252	19234	19215	19197	19179	19160	19142	19124	19105	19087	14.8
14.7	19437	19418	19400	19381	19363	19344	19326	19307	19289	19271	14.7
14.6	19623	19604	19585	19567	19548	19530	19511	19493	19474	19456	14.6
14.5	19809	19790	19772	19753	19734	19716	19697	19678	19660	19641	14.5
14.4	19997	19978	19959	19940	19921	19903	19884	19865	19846	19827	14.4
14.3	20187	20168	20149	20130	20111	20092	20073	20054	20035	20016	14.3
14.2	20379	20360	20341	20322	20303	20283	20264	20245	20226	20207	14.2
14.1	20572	20553	20533	20514	20495	20475	20456	20437	20418	20399	14.1
14.0	20765	20746	20726	20707	20688	20668	20649	20630	20611	20592	14.0
13.9	20961	20941	20921	20902	20883	20863	20843	20824	20804	20785	13.9
13.8	21158	21138	21118	21098	21078	21059	21039	21019	21000	20980	13.8
13.7	21357	21337	21317	21297	21277	21257	21237	21217	21197	21177	13.7
13.6	21557	21537	21517	21497	21477	21457	21437	21417	21397	21377	13.6
13.5	21757	21737	21717	21697	21677	21657	21637	21617	21597	21577	13.5
13.4	21959	21939	21919	21899	21879	21858	21838	21818	21798	21778	13.4
13.3	22162	22142	22121	22101	22081	22060	22040	22020	22000	21980	13.3
13.2	22368	22348	22327	22306	22285	22265	22244	22224	22203	22183	13.2
13.1	22576	22555	22534	22513	22493	22472	22451	22430	22409	22389	13.1
13.0	22785	22764	22743	22722	22701	22680	22659	22638	22617	22596	13.0
12.9	22995	22974	22953	22932	22911	22890	22869	22848	22827	22806	12.9
12.8	23207	23186	23165	23144	23123	23101	23080	23059	23038	23017	12.8
12.7	23421	23400	23379	23357	23335	23314	23292	23271	23250	23229	12.7
12.6	23636	23614	23593	23571	23550	23528	23507	23485	23464	23443	12.6
12.5	23854	23832	23810	23788	23766	23745	23723	23701	23679	23657	12.5
12.4	24073	24051	24029	24007	23985	23963	23941	23919	23897	23875	12.4
12.3	24294	24272	24250	24228	24206	24183	24161	24139	24117	24095	12.3
12.2	24516	24494	24472	24450	24428	24405	24383	24361	24339	24317	12.2
12.1	24739	24717	24694	24672	24650	24627	24605	24583	24561	24539	12.1
12.0	24966	24943	24920	24897	24875	24852	24829	24807	24784	24762	12.0
11.9	25194	25171	25148	25125	25102	25080	25057	25034	25011	24988	11.9
11.8	25424	25401	25378	25355	25332	25309	25286	25263	25240	25217	11.8
11.7	25656	25633	25610	25587	25564	25540	25517	25494	25471	25448	11.7
11.6	25889	25866	25842	25819	25796	25772	25749	25726	25703	25680	11.6
11.5	26126	26102	26078	26055	26031	26007	25983	25960	25936	25913	11.5
11.4	26364	26340	26316	26292	26268	26245	26221	26197	26173	26149	11.4
11.3	26604	26580	26556	26532	26508	26484	26460	26436	26412	26388	11.3
11.2	26845	26821	26797	26773	26749	26724	26700	26676	26652	26628	11.2
11.1	27090	27066	27041	27016	26992	26967	26943	26919	26894	26870	11.1
11.0	27336	27311	27286	27262	27237	27213	27188	27164	27139	27115	11.0

TABLE X.—DETERMINATION OF HIGHT BY THE BAROMETER.—ENGLISH.

PART 2.

Correction for Temperature.

H [1 + .001017 ($t' + t - 100$) or ($100 - t' - t$)]: Arguments: H and $t' + t - 100$ or $100 - (t' + t)$.

$t'+t-100$.	20.	40.	60.	80.	100.	200.	300.	400.	500.	600.	700.	800.	900.	1000.
°														
1	0	0	0	0	0	0	0	0	1	1	1	1	1	1
2	0	0	0	0	0	0	1	1	1	1	1	2	2	2
3	0	0	0	0	0	1	1	1	2	2	2	2	3	3
4	0	0	0	0	0	1	1	2	2	2	3	3	4	4
5	0	0	0	0	1	1	2	2	3	3	4	4	5	5
6	0	0	0	0	1	1	2	2	3	4	4	5	5	6
7	0	0	0	1	1	1	2	3	4	4	5	6	6	7
8	0	0	0	1	1	2	2	3	4	5	6	7	7	8
9	0	0	1	1	1	2	3	4	5	5	6	7	8	9
10	0	0	1	1	1	2	3	4	5	6	7	8	9	10
11	0	0	1	1	1	2	3	4	6	7	8	9	10	11
12	0	0	1	1	1	2	4	5	6	7	8	10	11	12
13	0	1	1	1	1	3	4	5	7	8	9	11	12	13
14	0	1	1	1	1	3	4	6	7	9	10	11	13	14
15	0	1	1	1	2	3	5	6	8	9	11	12	14	15
16	0	1	1	1	2	3	5	7	8	10	11	13	15	16
17	0	1	1	1	2	3	5	7	9	10	12	14	16	17
18	0	1	1	1	2	4	5	7	9	11	13	15	16	18
19	0	1	1	2	2	4	6	8	10	12	14	15	17	19
20	0	1	1	2	2	4	6	8	10	12	14	16	18	20
21	0	1	1	2	2	4	6	9	11	13	15	17	19	21
22	0	1	1	2	2	4	7	9	11	13	16	18	20	22
23	0	1	1	2	2	5	7	9	12	14	16	19	21	23
24	0	1	1	2	2	5	7	10	12	15	17	20	22	24
25	1	1	2	2	3	5	8	10	13	15	18	20	23	25
26	1	1	2	2	3	5	8	11	13	16	19	21	24	26
27	1	1	2	2	3	5	8	11	14	16	19	22	25	27
28	1	1	2	2	3	6	9	11	14	17	20	23	26	28
29	1	1	2	2	3	6	9	12	15	18	21	24	27	30
30	1	1	2	2	3	6	9	12	15	18	21	24	27	31
31	1	1	2	3	3	6	9	13	16	19	22	25	28	32
32	1	1	2	3	3	7	10	13	16	20	22	26	29	33
33	1	1	2	3	3	7	10	13	17	20	23	27	30	34
34	1	1	2	3	3	7	11	14	17	21	24	28	31	35
35	1	1	2	3	4	7	11	14	18	21	25	28	32	36
36	1	1	2	3	4	7	11	15	18	22	26	29	33	37
37	1	2	2	3	4	8	11	15	19	23	26	30	34	38
38	1	2	2	3	4	8	12	15	19	23	27	31	35	39
39	1	2	2	3	4	8	12	16	20	24	28	32	36	40
40	1	2	2	3	4	8	12	16	20	24	28	33	37	41
41	1	2	3	3	4	8	13	17	21	25	29	33	38	42
42	1	2	3	3	4	9	13	17	21	26	30	34	38	43
43	1	2	3	4	4	9	13	18	22	26	31	35	39	44
44	1	2	3	4	4	9	13	18	22	27	31	36	40	45
45	1	2	3	4	5	9	14	18	23	27	32	37	41	46
46	1	2	3	4	5	9	14	19	23	28	33	37	42	47
47	1	2	3	4	5	10	14	19	24	29	33	38	43	48
48	1	2	3	4	5	10	15	20	24	29	34	39	44	49
49	1	2	3	4	5	10	15	20	25	30	35	40	45	50
50	1	2	3	4	5	10	15	20	25	31	36	41	46	51

X.—BAROMETRIC HEIGHTS. ENGLISH.
Correction for Temperature.

1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	20000	30000
1	2	3	4	5	6	7	8	9	10	20	31
2	4	6	8	10	12	14	16	18	20	41	61
3	6	9	12	15	18	21	24	27	31	61	92
4	8	12	16	20	24	28	33	37	41	81	122
5	10	15	20	25	31	36	41	46	51	102	153
6	12	18	24	31	37	43	49	55	61	122	183
7	14	21	28	36	43	50	57	64	71	142	214
8	16	24	33	41	49	57	65	73	81	163	244
9	18	27	37	46	55	64	73	82	92	183	275
10	20	31	41	51	61	71	81	92	102	204	305
11	22	34	45	56	67	78	90	101	112	224	336
12	24	37	49	61	73	85	98	110	122	244	366
13	26	40	53	66	79	93	106	119	132	265	397
14	28	43	57	71	85	100	114	128	142	285	427
15	31	46	61	76	92	107	122	137	153	305	458
16	33	49	65	81	98	114	130	147	163	326	488
17	35	52	69	86	104	121	138	156	173	346	519
18	37	55	73	92	110	128	147	165	183	366	549
19	39	58	77	97	116	135	155	174	193	387	580
20	41	61	81	102	122	142	163	183	204	407	611
21	43	64	86	107	128	150	171	192	214	427	641
22	45	67	90	112	134	157	179	201	224	448	672
23	47	70	94	117	140	164	187	211	234	468	702
24	49	73	98	122	147	171	195	220	244	488	733
25	51	76	102	127	153	178	204	229	254	509	763
26	53	79	106	132	159	185	212	238	265	529	794
27	55	82	110	137	165	192	220	247	275	549	824
28	57	85	114	142	171	199	228	256	285	570	855
30	59	89	118	147	177	207	236	266	295	590	885
31	61	92	122	153	183	214	244	275	305	611	916
32	63	95	126	158	189	221	252	284	315	631	946
33	65	98	130	163	195	228	260	293	326	651	977
34	67	101	134	168	201	235	269	302	336	672	1007
35	69	104	138	173	208	242	277	311	346	692	1038
36	71	107	143	178	214	249	285	321	356	712	1068
37	73	110	147	183	220	256	293	330	366	733	1099
38	75	113	151	188	226	264	301	339	376	753	1129
39	77	116	155	193	232	271	309	348	387	773	1160
40	79	119	159	198	238	278	317	357	397	794	1190
41	81	122	163	204	244	285	326	366	407	814	1221
42	83	125	167	209	250	292	334	375	417	834	1252
43	85	128	171	214	256	299	342	385	427	855	1282
44	88	131	175	219	263	306	350	394	438	875	1313
45	90	134	179	224	269	313	358	403	448	895	1343
46	92	137	183	229	275	321	366	412	458	916	1374
47	94	140	187	234	281	328	374	421	468	936	1404
48	96	143	191	239	287	335	383	430	478	956	1435
49	98	147	195	244	293	342	391	440	488	977	1465
50	100	150	199	249	299	349	399	449	499	997	1496
51	102	153	204	254	305	356	407	458	509	1018	1526

TABLE X.—DETERMINATION OF HEIGHTS BY THE BAROMETER. ENGLISH.

PART III.

Correction for Latitude Plus from 0° to 44°; Minus from 46° to 90°.

$H''(1+.002606\cos 2\varphi)$: Argument H'' and φ.

H''	0° 90°	5 85	10 80	15 75	20 70	22 68	24 66	26 64	28 62	30 60	32 58	34 56	36 54	38 52	40 50	42 48	44 46
1000	3	3	2	2	2	2	2	2	1	1	1	1	1	1	0	0	0
1500	4	4	4	3	3	3	3	2	2	2	2	1	1	1	1	0	0
2000	5	5	5	4	4	4	4	3	3	3	2	2	2	1	1	1	0
2500	6	6	6	5	5	5	4	4	4	3	3	2	2	2	1	1	0
3000	8	8	7	6	6	6	5	5	4	4	3	3	2	2	1	1	0
3500	9	9	9	8	7	7	6	5	5	5	4	3	3	2	2	1	0
4000	10	10	10	9	8	8	7	6	6	5	5	4	3	3	2	1	0
4500	12	12	11	10	9	9	8	7	7	6	5	4	4	3	2	1	0
5000	13	13	12	11	10	9	9	8	7	6	6	5	4	3	2	1	0
5500	14	14	13	12	11	10	10	9	8	7	6	5	5	4	3	2	1
6000	16	15	14	13	12	11	11	10	9	8	7	6	5	4	3	2	1
6500	17	17	16	15	13	12	11	10	9	8	8	6	5	4	3	2	1
7000	18	18	17	16	14	13	12	11	10	9	8	7	6	4	3	2	1
7500	19	19	18	17	15	14	13	12	11	10	9	7	6	5	4	2	1
8000	21	20	19	18	16	15	14	13	12	10	9	8	7	5	4	2	1
8500	22	22	21	19	17	16	15	14	12	11	10	8	7	5	4	3	1
9000	23	23	22	20	18	17	16	14	13	12	10	9	7	6	4	3	1
9500	25	25	23	21	19	18	17	15	14	12	11	9	8	6	4	3	1
10000	26	26	25	23	20	19	18	16	14	13	11	10	8	6	5	3	1
10500	27	27	26	24	21	20	18	17	15	14	12	10	9	7	5	3	1
11000	29	28	27	25	22	21	19	18	16	14	13	11	9	7	5	3	1
11500	30	30	28	26	23	22	20	18	17	15	13	11	9	7	5	3	1
12000	31	31	30	27	24	23	21	19	17	16	14	12	10	8	6	3	1
12500	32	32	31	28	25	24	22	20	18	16	14	12	10	8	6	4	1
13000	34	34	32	29	26	24	23	21	19	17	15	13	11	8	6	4	1
13500	35	35	33	30	27	25	24	22	20	18	16	13	11	9	6	4	1
14000	36	36	34	31	28	26	25	22	20	18	16	14	11	9	6	4	1
14500	38	37	36	33	29	27	25	23	21	19	17	14	12	10	7	4	1
15000	39	39	37	34	30	28	26	24	22	20	17	15	12	10	7	4	1
15500	40	40	38	35	31	29	27	25	23	20	18	15	13	10	7	4	1
16000	42	41	39	36	32	30	28	26	23	21	18	16	13	10	7	4	1
16500	43	43	41	37	33	31	29	26	24	21	19	16	14	11	8	5	2
17000	44	44	42	38	34	32	30	27	25	22	20	17	14	11	8	5	2
17500	45	45	43	39	35	33	31	28	25	23	20	17	14	11	8	5	2
18000	47	46	44	40	36	34	32	29	26	23	21	18	15	12	8	5	2
18500	48	48	46	42	37	35	32	30	27	24	21	18	15	12	9	5	2
19000	49	49	47	43	38	36	33	30	28	25	22	19	16	12	9	5	2
19500	51	50	48	44	39	37	34	31	28	25	22	19	16	13	9	6	2
20000	52	52	49	45	40	38	35	32	29	26	23	20	16	13	9	6	2
20500	53	53	50	46	41	39	36	33	30	27	24	20	17	13	9	6	2
21000	55	54	52	47	42	39	37	34	30	27	24	21	17	13	10	6	2
21500	56	55	53	48	43	40	38	34	31	28	25	21	18	14	10	6	2
22000	57	57	54	49	44	41	39	35	32	29	25	22	18	14	10	6	2
22500	58	58	55	50	45	42	39	36	33	29	26	22	18	14	10	6	2
23000	60	59	57	52	46	43	40	37	33	30	26	23	19	15	11	6	2
23500	61	61	58	53	47	44	41	38	34	31	27	23	19	15	11	7	2
24000	62	62	59	54	48	45	42	38	35	31	28	24	20	15	11	7	2
24500	64	63	60	55	49	46	43	39	36	32	28	24	20	16	11	7	2
25000	65	64	61	56	50	47	44	40	36	32	29	25	20	16	11	7	2

X.—DETERMINATION OF HEIGHTS BY THE BAROMETER. ENGLISH.

PART IV.

Correction for Height.

Height.	Correction +.	
Feet.	Upper Station.	Lower Station.
3000	0	1
4000	1	1
5000	1	2
6000	2	3
7000	2	5
8000	3	6
9000	4	7
10000	5	..
11000	6	..
12000	7	..
13000	8	..
14000	9	..
15000	10	..

TABLE XI.—DETERMINATION OF HEIGHT BY THE BAROMETER. METRICAL.

(Taken from Angot.)

$$H = 18405\left[1 + \frac{1}{273}\left(\frac{t+t'}{2}\right)\right](1 + .0026\cos 2\varphi)\left(1 + \frac{H + 15986}{6366200}\right)\log\frac{P}{760}.$$

Part I contains $18405 \times \frac{P}{760}$: Argument P.

Part II " correction for temperature : Argument, $\frac{t+t'}{2}$ and H.

Part III " " " latitude and height : Argument, latitude and height.

EXAMPLE.

	mm.	°
Pic du Midi :	$P' = 570.3$.	$t' = -5.9$
Base :	$P = 765.5$.	$t = 7.0$

Latitude = 44°.

Part I	570.3 =	2296
"	765.5	−58
Difference		2354
Part II	2354 and $\frac{7.0 - 5.9}{2}$	6
Part III	2354 and 44°	7
	H =	2367

TABLE XI.—DETERMINATION OF HEIGHT BY THE BAROMETER.
METRICAL.
PART I.

mm.	0	1	2	3	4	5	6	7	8	9
	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.
770	−105	−115	−125	−136	−146	−156	−167	−177	−187	−197
760	00	− 11	− 21	− 32	− 42	− 53	− 63	− 73	− 84	− 94
	+	+	+	+	+	+	+	+	+	+
750	106	95	85	74	63	53	42	32	21	11
740	213	202	192	181	170	159	149	138	127	117
730	322	311	300	289	278	267	257	246	235	224
720	432	421	410	399	388	377	366	355	344	333
710	544	533	522	510	499	488	477	466	454	443
700	657	646	635	623	612	600	589	578	567	555
690	772	761	749	738	726	715	703	692	680	669
680	889	877	866	854	842	831	819	807	796	784
670	1008	996	984	972	960	948	936	924	913	901
660	1128	1116	1104	1091	1079	1067	1055	1043	1031	1019
650	1250	1237	1225	1213	1201	1189	1176	1164	1152	1140
640	1374	1361	1349	1336	1324	1312	1299	1287	1274	1262
630	1500	1487	1474	1462	1449	1436	1424	1411	1399	1386
620	1628	1615	1602	1588	1576	1563	1550	1538	1525	1512
610	1757	1744	1731	1718	1705	1692	1679	1666	1653	1640
600	1890	1876	1863	1850	1836	1823	1810	1797	1784	1771
590	2024	2010	1997	1983	1970	1956	1943	1930	1916	1903
580	2161	2147	2133	2119	2106	2092	2078	2065	2051	2038
570	2300	2286	2272	2258	2244	2230	2216	2202	2188	2174
560	2441	2427	2413	2398	2384	2370	2356	2342	2328	2314
550	2585	2571	2556	2542	2527	2513	2498	2484	2470	2455
540	2732	2717	2702	2687	2673	2658	2643	2629	2614	2600
530	2881	2866	2851	2836	2821	2806	2791	2776	2761	2747
520	3033	3018	3003	2987	2972	2957	2942	2927	2911	2896
510	3189	3173	3157	3142	3126	3111	3095	3080	3064	3049
500	3347	3331	3315	3299	3283	3267	3252	3236	3220	3204
490	3508	3492	3476	3460	3443	3427	3411	3395	3379	3363
480	3673	3657	3640	3623	3607	3590	3574	3558	3541	3525
470	3842	3825	3808	3791	3774	3757	3740	3723	3707	3690
460	4014	3996	3979	3962	3944	3927	3910	3893	3876	3859
450	4189	4171	4154	4136	4118	4101	4083	4066	4048	4031
440	4369	4351	4333	4315	4297	4279	4261	4243	4225	4207
430	4553	4534	4516	4497	4479	4460	4442	4424	4405	4387
420	4741	4722	4703	4684	4665	4646	4627	4609	4590	4571
410	4933	4914	4894	4875	4856	4836	4817	4798	4779	4760
400	5130	5110	5090	5070	5050	5030	5010	4990	4971	4952
390	5333	5313	5292	5272	5252	5231	5211	5190	5170	5150
380	5540	5519	5498	5477	5456	5435	5415	5394	5374	5353
370	5753	5732	5710	5689	5668	5646	5625	5604	5582	5561
360	5972	5950	5928	5906	5884	5862	5840	5818	5797	5775
350	6197	6174	6151	6129	6107	6084	6062	6039	6017	5995
340	6429	6405	6382	6359	6336	6313	6289	6266	6243	6220
330	6668	6643	6619	6595	6571	6548	6524	6500	6477	6453
320	6914	6889	6864	6840	6815	6791	6766	6742	6717	6693
310	7168	7142	7116	7091	7066	7040	7015	6990	6965	6939
300	7430	7403	7377	7351	7325	7299	7272	7246	7220	7194

XI.—DETERMINATION OF HEIGHT BY THE BAROMETER. METRICAL.

PART II.

Correction for Temperature C.

Height.	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	20°	30°	40°
m.	m.	m.	m.	m.	m.	m	m.	m.	m.	m.	m.	m.	m.
100	0	1	1	2	2	2	3	3	3	4	7	11	15
200	1	2	2	3	4	4	5	6	7	7	15	22	29
300	1	2	3	4	6	7	8	9	10	11	22	33	44
400	2	3	4	6	7	9	10	12	13	15	29	44	59
500	2	4	6	7	9	11	13	15	17	18	37	55	73
600	2	4	7	9	11	13	15	18	20	22	44	66	88
700	3	5	8	10	13	15	18	21	23	26	51	77	103
800	3	6	9	12	15	18	21	24	26	29	59	88	117
900	3	7	10	13	17	20	23	26	30	33	66	99	132
1000	4	7	11	15	18	22	26	29	33	37	73	110	147
1100	4	8	12	16	20	24	28	32	36	40	81	121	162
1200	4	9	13	18	22	26	31	35	40	44	88	132	176
1300	5	10	14	19	24	29	33	38	43	48	95	143	191
1400	5	10	15	21	26	31	36	41	46	51	103	154	206
1500	6	11	17	22	28	33	39	44	50	55	110	165	220
1600	6	11	18	24	29	35	41	47	53	59	117	176	235
1700	6	13	19	25	31	37	44	50	56	62	125	187	250
1800	7	13	20	26	33	40	46	53	60	66	132	198	264
1900	7	14	21	28	35	42	49	56	63	70	140	209	279
2000	7	15	22	29	37	44	51	59	66	73	147	220	293
2100	8	15	23	31	39	46	54	62	69	77	154	231	308
2200	8	16	24	32	40	48	57	65	73	81	162	242	323
2300	8	17	25	34	42	51	59	68	76	84	169	253	338
2400	9	18	26	35	44	53	62	71	79	88	176	264	352
2500	9	18	28	37	46	55	64	73	83	92	184	275	367
2600	10	19	29	38	48	57	67	76	86	95	191	286	382
2700	10	20	30	40	50	60	69	79	89	99	198	297	396
2800	10	21	31	41	51	62	72	82	93	103	206	308	411
2900	11	21	32	43	53	64	75	85	96	106	213	319	426
3000	11	22	33	44	55	66	77	88	99	110	220	330	440
3100	11	23	34	46	57	68	80	91	102	114	228	341	455
3200	12	24	35	47	59	70	82	94	106	117	235	352	470
3300	12	24	36	48	61	72	85	97	109	121	242	363	484
3400	13	25	37	50	62	75	87	100	112	125	250	374	499
3500	13	26	39	51	64	77	90	103	116	129	257	386	515
3600	13	26	40	53	66	79	93	106	119	132	264	396	529
3700	14	27	41	54	68	82	95	109	122	136	272	407	543
3800	14	28	42	56	70	84	98	112	126	140	279	418	558
3900	14	29	43	57	72	86	100	115	129	143	286	429	573
4000	15	30	44	59	73	88	103	117	132	147	294	440	587
5000	18	37	55	73	92	110	129	146	165	183	367	551	734
6000	22	44	66	88	110	132	154	176	198	220	440	661	881
7000	26	51	77	103	129	154	180	206	231	257	514	771	1028

TABLE XI.—DETERMINATION OF HEIGHT BY THE BAROMETER. METRICAL.

PART III.

Correction for Latitude and Height.

Height.	0.	5.	10.	15.	20.	25.	30.	35.	40.	45.	50.	55.	60.	65.	70.	75.	80.	85.
m.	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.	m	m.	m.	m.	m.
100	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
300	2	2	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
400	2	2	2	2	2	2	2	1	1	1	1	1	1	0	0	0	0	0
500	3	3	3	2	2	2	2	2	2	1	1	1	1	1	0	0	0	0
600	3	3	3	3	3	3	2	2	2	2	1	1	1	1	0	0	0	0
700	4	4	4	3	3	3	3	2	2	2	2	1	1	1	0	0	0	0
800	4	4	4	4	4	4	3	3	2	2	2	1	1	1	0	0	0	0
900	5	5	5	4	4	4	4	3	3	3	2	2	1	1	1	0	0	0
1000	5	5	5	5	5	4	4	4	3	3	2	2	1	1	1	0	0	0
1100	6	6	6	5	5	5	4	4	3	3	2	2	2	1	1	1	0	0
1200	6	6	6	6	6	5	5	4	4	3	3	2	2	1	1	1	0	0
1300	7	7	7	7	6	6	5	5	4	4	3	2	2	1	1	1	0	0
1400	7	7	7	7	7	6	6	5	4	4	3	3	2	2	1	1	0	0
1500	8	8	8	8	7	7	6	6	5	4	3	3	2	2	1	1	1	0
1600	9	9	8	8	8	7	7	6	5	4	4	3	2	2	1	1	1	0
1700	9	9	9	9	8	8	7	6	5	5	4	3	2	2	1	1	1	0
1800	10	10	9	9	9	8	7	7	6	5	4	3	3	2	1	1	1	0
1900	10	10	10	10	9	9	8	7	6	5	4	4	3	2	2	1	1	0
2000	11	11	11	10	10	9	8	7	7	6	5	4	3	2	2	1	1	0
2100	11	11	11	11	10	9	9	8	7	6	5	4	3	3	2	1	1	0
2200	12	12	12	11	11	10	9	8	7	6	5	4	3	3	2	1	1	0
2300	13	13	12	12	11	10	10	9	8	7	6	5	4	3	2	1	1	0
2400	13	13	13	12	12	11	10	9	8	7	6	5	4	3	2	2	1	0
2500	14	14	13	13	12	11	11	10	8	7	6	5	4	3	2	2	1	0
2600	14	14	14	13	13	12	11	10	9	8	6	5	4	3	2	2	1	1
2700	15	15	15	14	13	12	11	11	9	8	7	6	4	4	3	2	1	1
2800	16	16	15	15	14	13	12	11	10	8	7	6	5	4	3	2	1	1
2900	16	16	16	15	14	13	12	11	10	9	7	6	5	4	3	2	1	1
3000	17	17	16	16	15	14	13	12	10	9	8	6	5	4	3	2	1	1
3100	17	17	17	16	15	14	13	12	11	9	8	7	5	4	3	2	1	1
3200	18	18	18	17	16	15	14	13	11	10	8	7	6	4	3	2	1	1
3300	19	19	18	17	17	16	14	13	12	10	9	7	6	5	3	2	1	1
3400	19	19	19	18	17	16	15	13	12	10	9	7	6	5	4	3	2	1
3500	20	20	19	19	18	17	15	14	12	11	9	8	6	5	4	3	2	1
3600	20	20	20	19	18	17	16	14	13	11	9	8	6	5	4	3	2	1
3700	21	21	20	20	19	17	16	15	13	11	10	8	7	5	4	3	2	1
3800	22	22	21	20	19	18	17	15	14	12	10	8	7	6	4	3	2	1
3900	22	22	22	21	20	19	17	16	14	12	10	9	7	6	4	3	2	1
4000	23	23	22	21	20	19	17	16	14	13	11	9	7	6	5	3	2	1
4500	26	26	25	24	23	22	20	18	17	14	12	10	9	7	6	4	2	1
5000	29	29	29	28	26	25	23	21	19	16	14	12	10	8	7	5	3	1
5500	33	33	32	31	30	28	26	23	21	19	16	14	11	9	8	6	4	2
6000	36	36	35	34	33	31	29	26	23	21	18	15	13	11	9	7	5	3
6500	40	40	39	38	36	34	31	29	26	23	20	17	15	12	10	8	6	4
7000	43	43	42	41	39	37	34	31	28	25	22	19	16	14	11	9	7	5

TABLE XII.—REDUCTION OF BAROMETER READINGS TO SEA-LEVEL. ENGLISH.

(Original.)

Ft.	—30°	—20°	—10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
20	.03	.03	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
40	.05	.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
60	.08	.08	.07	.07	.07	.07	.07	.06	.06	.06	.06	.06	.06
80	.10	.10	.10	.10	.10	.09	.09	.08	.08	.08	.08	.08	.08
100	.13	.13	.12	.12	.12	.12	.12	.11	.11	.11	.11	.10	.10
120	.15	.15	.15	.15	.14	.14	.14	.13	.13	.13	.13	.12	.12
140	.18	.18	.17	.17	.17	.16	.16	.15	.15	.15	.15	.14	.14
160	.20	.20	.20	.19	.19	.19	.19	.18	.18	.18	.17	.17	.16
180	.23	.23	.22	.22	.22	.21	.21	.20	.20	.20	.19	.19	.18
200	.26	.25	.25	.24	.24	.23	.23	.22	.22	.22	.21	.21	.20
220	.28	.28	.27	.27	.26	.26	.25	.24	.24	.24	.23	.23	.22
240	.31	.30	.30	.29	.29	.28	.27	.27	.26	.26	.25	.25	.24
260	.33	.33	.32	.32	.31	.30	.30	.29	.29	.28	.28	.27	.26
280	.36	.36	.35	.34	.33	.33	.32	.31	.31	.30	.30	.29	.28
300	.39	.38	.37	.36	.36	.35	.34	.34	.33	.32	.32	.31	.30
320	.41	.41	.40	.39	.38	.37	.37	.36	.35	.34	.34	.33	.32
340	.44	.43	.42	.41	.40	.39	.39	.38	.37	.36	.36	.35	.34
360	.46	.46	.45	.44	.43	.42	.41	.41	.40	.39	.38	.37	.36
380	.49	.48	.47	.46	.45	.44	.44	.43	.42	.41	.40	.39	.38
400	.52	.51	.49	.48	.47	.46	.46	.45	.44	.43	.42	.41	.40
420	.54	.53	.52	.51	.50	.49	.48	.47	.46	.45	.44	.43	.42
440	.57	.56	.54	.53	.52	.51	.50	.49	.48	.47	.46	.45	.44
460	.59	.58	.57	.56	.55	.54	.53	.52	.51	.50	.49	.48	.47
480	.62	.61	.59	.58	.57	.56	.55	.54	.53	.52	.51	.50	.49
500	.64	.63	.62	.60	.59	.58	.57	.56	.55	.54	.53	.52	.51
520	.67	.66	.64	.63	.61	.60	.59	.58	.57	.56	.55	.54	.53
540	.69	.68	.67	.65	.64	.62	.61	.60	.59	.58	.57	.56	.55
560	.72	.71	.69	.68	.66	.65	.64	.63	.61	.60	.59	.58	.57
580	.75	.73	.71	.70	.68	.67	.66	.65	.63	.62	.61	.60	.59
600	.77	.76	.74	.72	.71	.69	.68	.67	.65	.64	.63	.62	.61
620	.80	.78	.76	.75	.73	.72	.70	.69	.67	.66	.65	.64	.63
640	.82	.80	.78	.77	.75	.74	.72	.71	.69	.68	.67	.66	.65
660	.85	.83	.81	.79	.78	.76	.75	.74	.72	.71	.69	.68	.67
680	.87	.85	.83	.82	.80	.79	.77	.76	.74	.73	.71	.70	.69
700	.90	.88	.86	.84	.82	.81	.79	.78	.76	.75	.73	.72	.71
720	.92	.90	.88	.87	.85	.83	.81	.80	.78	.77	.75	.74	.73
740	.95	.93	.91	.89	.87	.85	.83	.82	.80	.79	.77	.76	.75
760	.97	.95	.93	.91	.89	.88	.86	.84	.83	.81	.80	.78	.77
780	1.00	.98	.96	.94	.92	.90	.88	.86	.85	.83	.82	.80	.79
800	1.03	1.00	.98	.96	.94	.92	.90	.88	.87	.85	.84	.82	.81
820	1.05	1.03	1.01	.98	.96	.94	.92	.90	.89	.87	.86	.84	.83
840	1.08	1.05	1.03	1.01	.99	.96	.94	.93	.91	.89	.88	.86	.85
860	1.10	1.08	1.06	1.03	1.01	.99	.97	.95	.93	.92	.90	.88	.86
880	1.13	1.10	1.08	1.05	1.03	1.01	.99	.97	.95	.94	.92	.90	.88
900	1.15	1.13	1.10	1.08	1.06	1.03	1.01	.99	.97	.96	.94	.92	.90
920	1.18	1.15	1.13	1.10	1.08	1.06	1.03	1.01	.99	.98	.96	.94	.92
940	1.20	1.18	1.15	1.13	1.10	1.08	1.05	1.03	1.01	1.00	.98	.96	.94
960	1.23	1.20	1.17	1.15	1.13	1.11	1.08	1.06	1.04	1.02	1.00	.98	.96
980	1.25	1.23	1.20	1.17	1.15	1.13	1.10	1.08	1.06	1.04	1.02	1.00	.98
1000	1.28	1.25	1.22	1.20	1.17	1.15	1.12	1.10	1.08	1.06	1.04	1.02	1.00

XII.—REDUCTION TO SEA-LEVEL. ENGLISH.

Ft.	−30°	−20°	−10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
1000	1.28	1.25	1.22	1.20	1.17	1.15	1.12	1.10	1.08	1.06	1.04	1.02	1.00
1020	1.31	1.28	1.25	1.22	1.20	1.17	1.14	1.12	1.10	1.08	1.06	1.04	1.02
1040	1.33	1.30	1.27	1.25	1.22	1.20	1.17	1.15	1.13	1.10	1.08	1.06	1.04
1060	1.35	1.32	1.29	1.27	1.24	1.22	1.19	1.17	1.15	1.12	1.10	1.08	1.06
1080	1.38	1.35	1.32	1.29	1.27	1.24	1.21	1.19	1.17	1.15	1.12	1.10	1.08
1100	1.40	1.37	1.34	1.31	1.29	1.26	1.23	1.21	1.19	1.16	1.14	1.12	1.10
1120	1.43	1.40	1.37	1.34	1.31	1.28	1.25	1.23	1.21	1.18	1.16	1.14	1.12
1140	1.45	1.42	1.39	1.36	1.34	1.31	1.28	1.26	1.23	1.21	1.18	1.16	1.14
1160	1.48	1.45	1.42	1.39	1.36	1.33	1.30	1.28	1.25	1.23	1.20	1.18	1.16
1180	1.50	1.47	1.44	1.41	1.38	1.35	1.32	1.30	1.27	1.25	1.22	1.20	1.18
1200	1.53	1.49	1.46	1.43	1.40	1.37	1.34	1.32	1.29	1.27	1.24	1.22	1.20
1220	1.55	1.52	1.49	1.46	1.43	1.40	1.37	1.34	1.31	1.29	1.26	1.24	1.22
1240	1.58	1.54	1.51	1.48	1.45	1.42	1.39	1.36	1.34	1.31	1.29	1.26	1.24
1260	1.60	1.57	1.54	1.51	1.48	1.44	1.41	1.38	1.36	1.33	1.31	1.28	1.26
1280	1.63	1.59	1.56	1.53	1.50	1.46	1.43	1.40	1.38	1.35	1.33	1.30	1.28
1300	1.65	1.61	1.58	1.55	1.51	1.48	1.45	1.42	1.40	1.37	1.35	1.32	1.30
1320	1.68	1.64	1.61	1.57	1.54	1.50	1.47	1.44	1.42	1.39	1.37	1.34	1.32
1340	1.70	1.66	1.63	1.60	1.56	1.53	1.50	1.47	1.44	1.41	1.39	1.36	1.34
1360	1.72	1.68	1.65	1.62	1.58	1.55	1.52	1.49	1.46	1.43	1.41	1.38	1.36
1380	1.75	1.71	1.68	1.64	1.61	1.57	1.54	1.51	1.48	1.45	1.43	1.40	1.38
1400	1.77	1.73	1.70	1.66	1.63	1.59	1.56	1.53	1.50	1.47	1.45	1.42	1.40
1420	1.80	1.76	1.72	1.69	1.65	1.61	1.58	1.55	1.52	1.49	1.47	1.44	1.42
1440	1.82	1.78	1.75	1.71	1.68	1.64	1.61	1.58	1.55	1.52	1.49	1.46	1.43
1460	1.85	1.81	1.77	1.73	1.70	1.66	1.63	1.60	1.57	1.54	1.51	1.48	1.45
1480	1.87	1.83	1.79	1.76	1.72	1.68	1.65	1.62	1.59	1.56	1.53	1.50	1.47
1500	1.90	1.85	1.81	1.78	1.74	1.70	1.67	1.64	1.61	1.58	1.55	1.52	1.49
1520	1.92	1.88	1.84	1.80	1.76	1.72	1.69	1.66	1.63	1.60	1.57	1.54	1.51
1540	1.95	1.90	1.86	1.83	1.79	1.75	1.72	1.68	1.65	1.62	1.59	1.56	1.53
1560	1.97	1.92	1.88	1.85	1.81	1.77	1.74	1.70	1.67	1.64	1.61	1.58	1.55
1580	2.00	1.95	1.91	1.87	1.83	1.79	1.76	1.72	1.69	1.66	1.63	1.60	1.57
1600	2.02	1.97	1.93	1.89	1.85	1.81	1.78	1.74	1.71	1.68	1.65	1.62	1.59
1620	2.04	1.99	1.95	1.91	1.87	1.83	1.80	1.76	1.73	1.70	1.67	1.64	1.61
1640	2.07	2.02	1.98	1.94	1.90	1.86	1.83	1.79	1.75	1.72	1.69	1.66	1.63
1660	2.09	2.04	2.00	1.96	1.92	1.88	1.85	1.81	1.77	1.74	1.71	1.68	1.65
1680	2.12	2.07	2.03	1.98	1.94	1.90	1.87	1.83	1.79	1.76	1.73	1.70	1.67
1700	2.14	2.09	2.05	2.00	1.96	1.92	1.89	1.85	1.81	1.78	1.75	1.72	1.69
1720	2.16	2.11	2.07	2.02	1.98	1.94	1.91	1.87	1.83	1.80	1.77	1.74	1.71
1740	2.19	2.14	2.10	2.05	2.01	1.97	1.93	1.89	1.86	1.82	1.79	1.76	1.72
1760	2.21	2.16	2.12	2.07	2.03	1.99	1.95	1.91	1.88	1.84	1.81	1.78	1.74
1780	2.24	2.19	2.14	2.10	2.05	2.01	1.97	1.93	1.90	1.86	1.83	1.80	1.76
1800	2.26	2.21	2.16	2.12	2.07	2.03	1.99	1.95	1.92	1.88	1.85	1.82	1.78
1820	2.29	2.24	2.19	2.14	2.09	2.05	2.01	1.97	1.94	1.90	1.87	1.84	1.80
1840	2.31	2.26	2.21	2.17	2.12	2.08	2.04	2.00	1.96	1.92	1.89	1.85	1.82
1860	2.34	2.28	2.23	2.19	2.14	2.10	2.06	2.02	1.98	1.94	1.91	1.87	1.84
1880	2.36	2.31	2.26	2.21	2.17	2.12	2.08	2.04	2.00	1.96	1.93	1.89	1.86
1900	2.38	2.33	2.28	2.23	2.19	2.14	2.10	2.06	2.02	1.98	1.95	1.91	1.88
1920	2.41	2.36	2.31	2.26	2.21	2.16	2.12	2.08	2.04	2.00	1.97	1.93	1.90
1940	2.43	2.38	2.33	2.28	2.24	2.19	2.15	2.10	2.06	2.02	1.99	1.95	1.91
1960	2.45	2.40	2.35	2.30	2.26	2.21	2.17	2.12	2.08	2.04	2.01	1.97	1.93
1980	2.48	2.43	2.37	2.32	2.28	2.23	2.19	2.14	2.10	2.06	2.03	1.99	1.95
2000	2.50	2.45	2.39	2.34	2.30	2.25	2.21	2.16	2.12	2.08	2.05	2.01	1.97

XII.—REDUCTION TO SEA-LEVEL. ENGLISH.

Ft.	—30°	—20°	—10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
2000	2.50	2.45	2.40	2.35	2.30	2.25	2.21	2.16	2.12	2.08	2.04	2.00	1.97
2020	2.53	2.47	2.42	2.37	2.32	2.27	2.23	2.18	2.14	2.10	2.06	2.02	1.99
2040	2.55	2.50	2.44	2.39	2.35	2.30	2.25	2.21	2.16	2.12	2.08	2.04	2.01
2060	2.57	2.52	2.46	2.41	2.37	2.32	2.27	2.23	2.18	2.14	2.10	2.06	2.03
2080	2.60	2.54	2.49	2.44	2.39	2.34	2.29	2.25	2.20	2.16	2.12	2.08	2.05
2100	2.62	2.56	2.51	2.46	2.41	2.36	2.31	2.27	2.22	2.18	2.14	2.10	2.07
2120	2.64	2.58	2.53	2.48	2.43	2.38	2.33	2.29	2.24	2.20	2.16	2.12	2.08
2140	2.67	2.61	2.56	2.51	2.46	2.41	2.36	2.31	2.27	2.22	2.18	2.14	2.10
2160	2.69	2.63	2.58	2.53	2.48	2.43	2.38	2.33	2.29	2.24	2.20	2.16	2.12
2180	2.71	2.65	2.60	2.55	2.50	2.45	2.40	2.35	2.31	2.26	2.22	2.18	2.14
2200	2.74	2.68	2.62	2.57	2.52	2.47	2.42	2.37	2.33	2.28	2.24	2.20	2.16
2220	2.76	2.71	2.65	2.59	2.54	2.49	2.44	2.39	2.35	2.30	2.26	2.22	2.18
2240	2.79	2.73	2.67	2.62	2.57	2.51	2.46	2.41	2.37	2.32	2.28	2.24	2.20
2260	2.81	2.75	2.69	2.64	2.59	2.53	2.48	2.43	2.39	2.34	2.30	2.26	2.22
2280	2.83	2.77	2.71	2.66	2.61	2.55	2.50	2.45	2.41	2.36	2.32	2.28	2.24
2300	2.86	2.80	2.74	2.68	2.63	2.57	2.52	2.47	2.43	2.38	2.34	2.30	2.26
2320	2.88	2.82	2.76	2.70	2.65	2.59	2.54	2.49	2.45	2.40	2.36	2.32	2.27
2340	2.91	2.85	2.79	2.73	2.67	2.62	2.57	2.52	2.47	2.42	2.38	2.34	2.29
2360	2.93	2.87	2.81	2.75	2.69	2.64	2.59	2.54	2.49	2.44	2.40	2.36	2.31
2380	2.95	2.89	2.83	2.77	2.71	2.66	2.61	2.56	2.51	2.46	2.42	2.38	2.33
2400	2.98	2.91	2.85	2.79	2.73	2.68	2.63	2.58	2.53	2.48	2.44	2.40	2.35
2420	3.00	2.94	2.87	2.81	2.75	2.70	2.65	2.60	2.55	2.50	2.46	2.41	2.37
2440	3.02	2.96	2.90	2.84	2.78	2.73	2.67	2.62	2.57	2.52	2.48	2.43	2.39
2460	3.05	2.98	2.92	2.86	2.80	2.75	2.69	2.64	2.59	2.54	2.50	2.45	2.41
2480	3.07	3.01	2.94	2.88	2.82	2.77	2.71	2.66	2.61	2.56	2.52	2.47	2.43
2500	3.09	3.03	2.96	2.90	2.84	2.79	2.73	2.68	2.63	2.58	2.54	2.49	2.45
2520	3.12	3.05	2.98	2.92	2.86	2.81	2.75	2.70	2.65	2.60	2.55	2.50	2.46
2540	3.14	3.08	3.01	2.95	2.89	2.83	2.78	2.72	2.67	2.62	2.57	2.52	2.48
2560	3.16	3.10	3.03	2.97	2.91	2.85	2.80	2.74	2.69	2.64	2.59	2.54	2.50
2580	3.19	3.12	3.05	2.99	2.93	2.87	2.82	2.76	2.71	2.66	2.61	2.56	2.52
2600	3.21	3.14	3.07	3.01	2.95	2.89	2.84	2.78	2.73	2.68	2.63	2.58	2.54
2620	3.24	3.17	3.10	3.03	2.97	2.91	2.86	2.80	2.75	2.70	2.65	2.60	2.55
2640	3.26	3.19	3.12	3.06	3.00	2.94	2.88	2.82	2.77	2.72	2.67	2.62	2.57
2660	3.28	3.21	3.14	3.08	3.02	2.96	2.90	2.84	2.79	2.74	2.69	2.64	2.59
2680	3.31	3.24	3.17	3.10	3.04	2.98	2.92	2.86	2.81	2.76	2.71	2.66	2.61
2700	3.33	3.26	3.19	3.12	3.06	3.00	2.94	2.88	2.83	2.78	2.73	2.68	2.63
2720	3.35	3.28	3.21	3.14	3.08	3.02	2.96	2.90	2.85	2.80	2.74	2.69	2.65
2740	3.38	3.31	3.24	3.17	3.10	3.04	2.98	2.92	2.87	2.82	2.76	2.71	2.67
2760	3.40	3.33	3.26	3.19	3.12	3.06	3.00	2.94	2.89	2.84	2.78	2.73	2.69
2780	3.42	3.35	3.28	3.21	3.14	3.08	3.02	2.96	2.91	2.86	2.80	2.75	2.71
2800	3.44	3.37	3.30	3.23	3.16	3.10	3.04	2.98	2.93	2.88	2.82	2.77	2.73
2820	3.47	3.39	3.32	3.25	3.18	3.12	3.06	3.00	2.95	2.89	2.84	2.79	2.74
2840	3.49	3.42	3.35	3.28	3.21	3.15	3.09	3.03	2.97	2.91	2.86	2.81	2.76
2860	3.51	3.44	3.37	3.30	3.23	3.17	3.11	3.05	2.99	2.93	2.88	2.83	2.78
2880	3.54	3.46	3.39	3.32	3.25	3.19	3.13	3.07	3.01	2.95	2.90	2.85	2.80
2900	3.56	3.48	3.41	3.34	3.27	3.21	3.15	3.09	3.03	2.97	2.92	2.87	2.82
2920	3.58	3.50	3.43	3.36	3.29	3.23	3.17	3.11	3.05	2.99	2.94	2.88	2.83
2940	3.61	3.53	3.46	3.39	3.32	3.25	3.19	3.13	3.07	3.01	2.96	2.90	2.85
2960	3.63	3.55	3.48	3.41	3.34	3.27	3.21	3.15	3.09	3.03	2.98	2.92	2.87
2980	3.65	3.57	3.50	3.43	3.36	3.29	3.23	3.17	3.11	3.05	3.00	2.94	2.89
3000	3.67	3.59	3.52	3.45	3.38	3.31	3.25	3.19	3.13	3.07	3.02	2.96	2.91

XII.—REDUCTION TO SEA-LEVEL. ENGLISH.

Ft.	—30°	—20°	—10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
3000	3.67	3.59	3.52	3.45	3.38	3.31	3.25	3.19	3.13	3.07	3.02	2.96	2.91
3020	3.70	3.62	3.54	3.47	3.40	3.33	3.27	3.21	3.15	3.09	3.03	2.98	2.92
3040	3.72	3.64	3.57	3.50	3.43	3.36	3.29	3.23	3.17	3.11	3.05	3.00	2.94
3060	3.74	3.66	3.59	3.52	3.45	3.38	3.31	3.25	3.19	3.13	3.07	3.02	2.96
3080	3.77	3.69	3.61	3.54	3.47	3.40	3.33	3.27	3.21	3.15	3.09	3.04	2.98
3100	3.79	3.71	3.63	3.56	3.49	3.42	3.35	3.29	3.23	3.17	3.11	3.06	3.00
3120	3.81	3.73	3.65	3.58	3.51	3.44	3.37	3.31	3.24	3.18	3.13	3.07	3.02
3140	3.84	3.76	3.68	3.60	3.53	3.46	3.39	3.33	3.26	3.20	3.15	3.09	3.04
3160	3.86	3.78	3.70	3.62	3.55	3.48	3.41	3.35	3.28	3.22	3.17	3.11	3.06
3180	3.88	3.80	3.72	3.64	3.57	3.50	3.43	3.37	3.30	3.24	3.19	3.13	3.08
3200	3.90	3.82	3.74	3.66	3.59	3.52	3.45	3.39	3.32	3.26	3.21	3.15	3.10
3220	3.92	3.84	3.76	3.68	3.61	3.54	3.47	3.41	3.34	3.28	3.22	3.16	3.11
3240	3.95	3.87	3.79	3.71	3.63	3.56	3.49	3.43	3.36	3.30	3.24	3.18	3.13
3260	3.97	3.89	3.81	3.73	3.65	3.58	3.51	3.45	3.38	3.32	3.26	3.20	3.15
3280	3.99	3.91	3.83	3.75	3.67	3.60	3.53	3.47	3.40	3.34	3.28	3.22	3.17
3300	4.01	3.93	3.85	3.77	3.69	3.62	3.55	3.49	3.42	3.36	3.30	3.24	3.19
3320	4.04	3.95	3.87	3.79	3.71	3.64	3.57	3.51	3.44	3.38	3.32	3.26	3.20
3340	4.06	3.98	3.90	3.82	3.74	3.66	3.59	3.53	3.46	3.40	3.34	3.28	3.22
3360	4.08	4.00	3.92	3.84	3.76	3.68	3.61	3.55	3.48	3.42	3.36	3.30	3.24
3380	4.11	4.02	3.94	3.86	3.78	3.70	3.63	3.57	3.50	3.44	3.38	3.32	3.26
3400	4.13	4.04	3.96	3.88	3.80	3.72	3.65	3.59	3.52	3.46	3.40	3.34	3.28
3420	4.15	4.06	3.98	3.90	3.82	3.74	3.67	3.60	3.54	3.47	3.41	3.35	3.29
3440	4.18	4.09	4.00	3.92	3.84	3.76	3.69	3.62	3.56	3.49	3.43	3.37	3.31
3460	4.20	4.11	4.02	3.94	3.86	3.78	3.71	3.64	3.58	3.51	3.45	3.39	3.33
3480	4.22	4.13	4.04	3.96	3.88	3.80	3.73	3.66	3.60	3.53	3.47	3.41	3.35
3500	4.24	4.15	4.06	3.98	3.90	3.82	3.75	3.68	3.62	3.55	3.49	3.43	3.37
3520	4.26	4.17	4.08	4.00	3.92	3.84	3.77	3.70	3.63	3.57	3.50	3.44	3.38
3540	4.29	4.20	4.11	4.03	3.95	3.87	3.79	3.72	3.65	3.59	3.52	3.46	3.40
3560	4.31	4.22	4.13	4.05	3.97	3.89	3.81	3.74	3.67	3.61	3.54	3.48	3.42
3580	4.33	4.24	4.15	4.07	3.99	3.91	3.83	3.76	3.69	3.63	3.56	3.50	3.44
3600	4.35	4.26	4.17	4.09	4.01	3.93	3.85	3.78	3.71	3.65	3.58	3.52	3.46
3620	4.37	4.28	4.19	4.11	4.03	3.95	3.87	3.80	3.73	3.66	3.59	3.53	3.47
3640	4.40	4.31	4.22	4.13	4.05	3.97	3.89	3.82	3.75	3.68	3.61	3.55	3.49
3660	4.42	4.33	4.24	4.15	4.07	3.99	3.91	3.84	3.77	3.70	3.63	3.57	3.51
3680	4.44	4.35	4.26	4.17	4.09	4.01	3.93	3.86	3.79	3.72	3.65	3.59	3.53
3700	4.46	4.37	4.28	4.19	4.11	4.03	3.95	3.88	3.81	3.74	3.67	3.61	3.55
3720	4.48	4.39	4.30	4.21	4.13	4.05	3.97	3.90	3.82	3.75	3.69	3.62	3.56
3740	4.51	4.42	4.33	4.24	4.15	4.07	3.99	3.92	3.84	3.77	3.71	3.64	3.58
3760	4.53	4.44	4.35	4.26	4.17	4.09	4.01	3.94	3.86	3.79	3.73	3.66	3.60
3780	4.55	4.46	4.37	4.28	4.19	4.11	4.03	3.96	3.88	3.81	3.75	3.68	3.62
3800	4.57	4.48	4.39	4.30	4.21	4.13	4.05	3.98	3.90	3.83	3.77	3.70	3.64
3820	4.59	4.50	4.41	4.32	4.23	4.15	4.07	4.00	3.92	3.85	3.78	3.71	3.65
3840	4.62	4.52	4.43	4.34	4.26	4.17	4.09	4.02	3.94	3.87	3.80	3.73	3.67
3860	4.64	4.54	4.45	4.36	4.28	4.19	4.11	4.04	3.96	3.89	3.82	3.75	3.69
3880	4.66	4.56	4.47	4.38	4.30	4.21	4.13	4.06	3.98	3.91	3.84	3.77	3.71
3900	4.68	4.58	4.49	4.40	4.32	4.23	4.15	4.08	4.00	3.93	3.86	3.79	3.73
3920	4.70	4.60	4.51	4.42	4.34	4.25	4.17	4.09	4.02	3.95	3.88	3.81	3.75
3940	4.73	4.63	4.54	4.45	4.36	4.27	4.19	4.11	4.04	3.96	3.89	3.83	3.77
3960	4.75	4.65	4.56	4.47	4.38	4.29	4.21	4.13	4.06	3.98	3.91	3.85	3.79
3980	4.77	4.67	4.58	4.49	4.40	4.31	4.23	4.15	4.08	4.00	3.93	3.87	3.81
4000	4.79	4.69	4.60	4.51	4.42	4.33	4.25	4.17	4.10	4.02	3.95	3.89	3.83

XII—REDUCTION TO SEA-LEVEL. ENGLISH.

Ft.	—30°	—20°	—10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
4000	4.79	4.69	4.60	4.51	4.42	4.33	4.25	4.17	4.10	4.02	3.95	3.89	3.83
4020	4.81	4.71	4.62	4.53	4.44	4.35	4.27	4.19	4.11	4.04	3.97	3.90	3.84
4040	4.84	4.74	4.64	4.55	4.46	4.37	4.29	4.21	4.13	4.06	3.99	3.92	3.86
4060	4.86	4.76	4.66	4.57	4.48	4.39	4.31	4.23	4.15	4.08	4.01	3.94	3.88
4080	4.88	4.78	4.68	4.59	4.50	4.41	4.33	4.25	4.17	4.10	4.03	3.96	3.90
4100	4.90	4.80	4.70	4.61	4.52	4.43	4.35	4.27	4.19	4.12	4.05	3.98	3.91
4120	4.92	4.82	4.72	4.63	4.54	4.45	4.37	4.29	4.21	4.13	4.06	3.99	3.93
4140	4.95	4.85	4.75	4.65	4.56	4.47	4.39	4.31	4.23	4.15	4.08	4.01	3.95
4160	4.97	4.87	4.77	4.67	4.58	4.49	4.41	4.33	4.25	4.17	4.10	4.03	3.96
4180	4.99	4.89	4.79	4.69	4.60	4.51	4.43	4.35	4.27	4.19	4.12	4.05	3.98
4200	5.01	4.91	4.81	4.71	4.62	4.53	4.45	4.37	4.29	4.21	4.14	4.07	4.00
4220	5.03	4.93	4.83	4.73	4.64	4.55	4.46	4.38	4.30	4.22	4.15	4.08	4.01
4240	5.06	4.96	4.86	4.76	4.66	4.57	4.48	4.40	4.32	4.24	4.17	4.10	4.03
4260	5.08	4.98	4.88	4.78	4.68	4.59	4.50	4.42	4.34	4.26	4.19	4.12	4.05
4280	5.10	5.00	4.90	4.80	4.70	4.61	4.52	4.44	4.36	4.28	4.21	4.13	4.06
4300	5.12	5.02	4.92	4.82	4.72	4.63	4.54	4.46	4.38	4.30	4.23	4.15	4.08
4320	5.14	5.04	4.94	4.84	4.74	4.65	4.56	4.48	4.39	4.31	4.24	4.17	4.10
4340	5.17	5.06	4.96	4.86	4.76	4.67	4.58	4.50	4.41	4.33	4.26	4.18	4.11
4360	5.19	5.08	4.98	4.88	4.78	4.69	4.60	4.52	4.43	4.35	4.28	4.20	4.13
4380	5.21	5.10	5.00	4.90	4.80	4.71	4.62	4.54	4.45	4.37	4.30	4.22	4.15
4400	5.23	5.12	5.02	4.92	4.82	4.73	4.64	4.56	4.47	4.39	4.32	4.24	4.17
4420	5.25	5.14	5.04	4.94	4.84	4.75	4.66	4.57	4.49	4.41	4.33	4.25	4.18
4440	5.28	5.17	5.06	4.96	4.86	4.77	4.68	4.59	4.51	4.43	4.35	4.27	4.20
4460	5.30	5.19	5.08	4.98	4.88	4.79	4.70	4.61	4.53	4.45	4.37	4.29	4.22
4480	5.32	5.21	5.10	5.00	4.90	4.81	4.72	4.63	4.55	4.47	4.39	4.31	4.24
4500	5.34	5.23	5.12	5.02	4.92	4.84	4.74	4.65	4.57	4.49	4.41	4.33	4.26
4520	5.36	5.25	5.14	5.04	4.94	4.85	4.76	4.67	4.58	4.50	4.42	4.34	4.27
4540	5.38	5.27	5.16	5.06	4.96	4.87	4.78	4.69	4.60	4.52	4.44	4.36	4.29
4560	5.40	5.29	5.18	5.08	4.98	4.89	4.80	4.71	4.62	4.54	4.46	4.38	4.31
4580	5.42	5.31	5.20	5.10	5.00	4.91	4.82	4.73	4.64	4.56	4.48	4.40	4.33
4600	5.44	5.33	5.22	5.12	5.02	4.93	4.84	4.75	4.66	4.58	4.50	4.42	4.35
4620	5.46	5.35	5.24	5.14	5.04	4.94	4.85	4.76	4.67	4.59	4.51	4.43	4.36
4640	5.49	5.38	5.27	5.16	5.06	4.96	4.87	4.78	4.69	4.61	4.53	4.45	4.38
4660	5.51	5.40	5.29	5.18	5.08	4.98	4.89	4.80	4.71	4.63	4.55	4.47	4.40
4680	5.53	5.42	5.31	5.20	5.10	5.00	4.91	4.82	4.73	4.65	4.57	4.49	4.42
4700	5.55	5.44	5.33	5.22	5.12	5.02	4.93	4.84	4.75	4.67	4.59	4.51	4.43
4720	5.57	5.46	5.35	5.24	5.14	5.04	4.94	4.85	4.77	4.68	4.60	4.52	4.45
4740	5.60	5.48	5.37	5.26	5.16	5.06	4.96	4.87	4.79	4.70	4.62	4.54	4.47
4760	5.62	5.50	5.39	5.28	5.18	5.08	4.98	4.89	4.81	4.72	4.64	4.56	4.48
4780	5.64	5.52	5.41	5.30	5.20	5.10	5.00	4.91	4.83	4.74	4.66	4.58	4.50
4800	5.66	5.54	5.43	5.32	5.22	5.12	5.02	4.93	4.85	4.76	4.68	4.60	4.52
4820	5.68	5.56	5.45	5.34	5.24	5.14	5.04	4.95	4.86	4.77	4.69	4.61	4.53
4840	5.70	5.58	5.47	5.36	5.26	5.16	5.06	4.97	4.88	4.79	4.71	4.63	4.55
4860	5.72	5.60	5.49	5.38	5.28	5.18	5.08	4.99	4.90	4.81	4.73	4.65	4.57
4880	5.74	5.62	5.51	5.40	5.30	5.20	5.10	5.01	4.92	4.83	4.75	4.67	4.59
4900	5.76	5.64	5.53	5.42	5.32	5.22	5.12	5.03	4.94	4.85	4.77	4.69	4.61
4920	5.78	5.66	5.55	5.44	5.34	5.24	5.14	5.04	4.95	4.86	4.78	4.70	4.62
4940	5.81	5.69	5.57	5.46	5.36	5.26	5.16	5.06	4.97	4.88	4.80	4.72	4.64
4960	5.83	5.71	5.59	5.48	5.38	5.28	5.18	5.08	4.99	4.90	4.82	4.74	4.66
4980	5.85	5.73	5.61	5.50	5.40	5.30	5.20	5.10	5.01	4.92	4.84	4.75	4.67
5000	5.87	5.75	5.63	5.52	5.42	5.32	5.22	5.12	5.03	4.94	4.86	4.77	4.69

XII.—REDUCTION TO SEA-LEVEL. ENGLISH.

Ft.	−30°	−20°	−10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
5000	5.87	5.75	5.63	5.52	5.42	5.32	5.22	5.12	5.03	4.94	4.86	4.77	4.69
5020	5.89	5.77	5.65	5.54	5.43	5.33	5.23	5.13	5.04	4.95	4.87	4.79	4.71
5040	5.91	5.79	5.67	5.56	5.45	5.35	5.25	5.15	5.06	4.97	4.89	4.80	4.72
5060	5.93	5.81	5.69	5.58	5.47	5.37	5.27	5.17	5.08	4.99	4.91	4.82	4.74
5080	5.95	5.83	5.71	5.60	5.49	5.39	5.29	5.19	5.10	5.01	4.93	4.84	4.76
5100	5.97	5.85	5.73	5.62	5.51	5.41	5.31	5.21	5.12	5.03	4.95	4.86	4.78
5120	5.99	5.87	5.75	5.64	5.53	5.43	5.33	5.23	5.13	5.04	4.96	4.87	4.79
5140	6.02	5.89	5.77	5.66	5.55	5.45	5.35	5.25	5.15	5.06	4.98	4.89	4.81
5160	6.04	5.91	5.79	5.68	5.57	5.47	5.37	5.27	5.17	5.08	5.00	4.91	4.83
5180	6.06	5.93	5.81	5.70	5.59	5.49	5.39	5.29	5.19	5.10	5.01	4.93	4.85
5200	6.08	5.95	5.83	5.72	5.61	5.51	5.41	5.31	5.21	5.12	5.03	4.95	4.87
5220	6.10	5.97	5.85	5.74	5.63	5.52	5.42	5.32	5.22	5.13	5.04	4.96	4.88
5240	6.12	6.00	5.88	5.76	5.65	5.54	5.44	5.34	5.24	5.15	5.06	4.98	4.90
5260	6.14	6.02	5.90	5.78	5.67	5.56	5.46	5.36	5.26	5.17	5.08	5.00	4.92
5280	6.16	6.04	5.92	5.80	5.69	5.58	5.48	5.38	5.28	5.19	5.10	5.01	4.93
5300	6.18	6.06	5.94	5.82	5.71	5.60	5.50	5.40	5.30	5.21	5.12	5.03	4.95
5320	6.20	6.08	5.96	5.84	5.73	5.62	5.51	5.41	5.31	5.22	5.13	5.05	4.97
5340	6.22	6.10	5.98	5.86	5.75	5.64	5.53	5.43	5.33	5.24	5.15	5.06	4.98
5360	6.24	6.12	6.00	5.88	5.77	5.66	5.55	5.45	5.35	5.26	5.17	5.08	5.00
5380	6.26	6.14	6.02	5.90	5.79	5.68	5.57	5.47	5.37	5.28	5.19	5.10	5.02
5400	6.28	6.16	6.04	5.92	5.81	5.70	5.59	5.49	5.39	5.30	5.21	5.12	5.04
5420	6.30	6.18	6.06	5.94	5.82	5.71	5.60	5.50	5.40	5.31	5.22	5.13	5.05
5440	6.33	6.20	6.08	5.96	5.84	5.73	5.62	5.52	5.42	5.33	5.24	5.15	5.07
5460	6.35	6.22	6.10	5.98	5.86	5.75	5.64	5.54	5.44	5.35	5.26	5.17	5.09
5480	6.37	6.24	6.12	6.00	5.88	5.77	5.66	5.56	5.46	5.37	5.28	5.19	5.10
5500	6.39	6.26	6.14	6.02	5.90	5.79	5.68	5.58	5.48	5.39	5.30	5.21	5.12
5520	6.41	6.28	6.15	6.03	5.92	5.81	5.70	5.59	5.49	5.40	5.31	5.22	5.13
5540	6.43	6.30	6.17	6.05	5.94	5.83	5.72	5.61	5.51	5.42	5.33	5.24	5.15
5560	6.45	6.32	6.19	6.07	5.96	5.85	5.74	5.63	5.53	5.44	5.35	5.26	5.17
5580	6.47	6.34	6.21	6.09	5.98	5.87	5.76	5.65	5.55	5.46	5.36	5.27	5.19
5600	6.49	6.36	6.23	6.11	6.00	5.89	5.78	5.67	5.57	5.48	5.38	5.29	5.21
5620	6.51	6.38	6.25	6.13	6.01	5.90	5.79	5.68	5.58	5.49	5.40	5.31	5.22
5640	6.53	6.40	6.27	6.15	6.03	5.92	5.81	5.70	5.60	5.51	5.41	5.32	5.24
5660	6.55	6.42	6.29	6.17	6.05	5.94	5.83	5.72	5.62	5.53	5.43	5.34	5.26
5680	6.57	6.44	6.31	6.19	6.07	5.96	5.85	5.74	5.64	5.54	5.45	5.36	5.27
5700	6.59	6.46	6.33	6.21	6.09	5.98	5.87	5.76	5.66	5.56	5.47	5.38	5.29
5720	6.61	6.48	6.35	6.23	6.11	5.99	5.88	5.78	5.67	5.57	5.48	5.39	5.30
5740	6.63	6.50	6.37	6.25	6.13	6.01	5.90	5.80	5.69	5.59	5.50	5.41	5.32
5760	6.65	6.52	6.39	6.27	6.15	6.03	5.92	5.82	5.71	5.61	5.52	5.43	5.34
5780	6.67	6.54	6.41	6.29	6.17	6.05	5.94	5.84	5.73	5.63	5.54	5.44	5.35
5800	6.69	6.56	6.43	6.31	6.19	6.07	5.96	5.86	5.75	5.65	5.56	5.46	5.37
5820	6.71	6.58	6.45	6.32	6.20	6.08	5.97	5.87	5.76	5.66	5.57	5.48	5.39
5840	6.73	6.60	6.47	6.34	6.22	6.10	5.99	5.89	5.78	5.68	5.59	5.49	5.40
5860	6.75	6.62	6.49	6.36	6.24	6.12	6.01	5.91	5.80	5.70	5.61	5.51	5.42
5880	6.77	6.64	6.51	6.38	6.26	6.14	6.03	5.93	5.82	5.72	5.62	5.53	5.44
5900	6.79	6.66	6.53	6.40	6.28	6.16	6.05	5.95	5.84	5.74	5.64	5.55	5.46
5920	6.81	6.68	6.55	6.42	6.30	6.18	6.07	5.96	5.85	5.75	5.66	5.56	5.47
5940	6.83	6.70	6.57	6.44	6.32	6.20	6.09	5.98	5.87	5.77	5.67	5.58	5.49
5960	6.85	6.72	6.59	6.46	6.34	6.22	6.11	6.00	5.89	5.79	5.69	5.60	5.51
5980	6.87	6.74	6.61	6.48	6.36	6.24	6.13	6.02	5.91	5.81	5.71	5.62	5.52
6000	6.89	6.76	6.63	6.50	6.38	6.26	6.15	6.04	5.93	5.83	5.73	5.64	5.54

XII.—REDUCTION TO SEA-LEVEL. ENGLISH.

Ft.	—30°	—20°	—10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
6000	6.89	6.76	6.63	6.50	6.38	6.26	6.15	6.04	5.93	5.83	5.73	5.64	5.54
6020	6.91	6.78	6.64	6.51	6.39	6.27	6.16	6.05	5.94	5.84	5.74	5.65	5.55
6040	6.93	6.80	6.66	6.53	6.41	6.29	6.18	6.07	5.96	5.86	5.76	5.67	5.57
6060	6.95	6.82	6.68	6.55	6.43	6.31	6.20	6.09	5.98	5.88	5.78	5.69	5.59
6080	6.97	6.84	6.70	6.57	6.45	6.33	6.22	6.11	6.00	5.89	5.79	5.70	5.60
6100	6.99	6.86	6.72	6.59	6.47	6.35	6.24	6.13	6.02	5.91	5.81	5.72	5.62
6120	7.01	6.88	6.74	6.61	6.48	6.36	6.25	6.14	6.03	5.92	5.82	5.73	5.64
6140	7.03	6.90	6.76	6.63	6.50	6.38	6.27	6.16	6.05	5.94	5.84	5.75	5.65
6160	7.05	6.92	6.78	6.65	6.52	6.40	6.29	6.18	6.07	5.96	5.86	5.77	5.67
6180	7.07	6.94	6.80	6.67	6.54	6.42	6.31	6.20	6.09	5.98	5.88	5.78	5.69
6200	7.09	6.96	6.82	6.69	6.56	6.44	6.33	6.22	6.11	6.00	5.90	5.80	5.71
6220	7.11	6.97	6.84	6.71	6.58	6.46	6.34	6.23	6.12	6.01	5.91	5.81	5.72
6240	7.13	6.99	6.86	6.73	6.60	6.48	6.36	6.25	6.14	6.03	5.93	5.83	5.74
6260	7.15	7.01	6.88	6.75	6.62	6.50	6.38	6.27	6.16	6.05	5.95	5.85	5.76
6280	7.17	7.03	6.90	6.77	6.64	6.52	6.40	6.28	6.17	6.07	5.96	5.86	5.77
6300	7.19	7.05	6.92	6.79	6.66	6.54	6.42	6.30	6.19	6.09	5.98	5.88	5.79
6320	7.21	7.07	6.93	6.80	6.67	6.55	6.43	6.32	6.21	6.10	6.00	5.90	5.80
6340	7.23	7.09	6.95	6.82	6.69	6.57	6.45	6.33	6.22	6.12	6.01	5.91	5.82
6360	7.25	7.11	6.97	6.84	6.71	6.59	6.47	6.35	6.24	6.14	6.03	5.93	5.84
6380	7.27	7.13	6.99	6.86	6.73	6.61	6.49	6.37	6.26	6.15	6.05	5.95	5.85
6400	7.29	7.15	7.01	6.88	6.75	6.63	6.51	6.39	6.28	6.17	6.07	5.97	5.87
6420	7.31	7.17	7.03	6.89	6.76	6.64	6.52	6.40	6.29	6.19	6.08	5.98	5.88
6440	7.33	7.19	7.05	6.91	6.78	6.66	6.54	6.42	6.31	6.20	6.10	6.00	5.90
6460	7.35	7.21	7.07	6.93	6.80	6.68	6.56	6.44	6.33	6.22	6.12	6.02	5.92
6480	7.37	7.23	7.09	6.95	6.82	6.70	6.58	6.46	6.35	6.24	6.13	6.03	5.93
6500	7.39	7.25	7.11	6.97	6.84	6.72	6.60	6.48	6.37	6.26	6.15	6.05	5.95
6520	7.41	7.26	7.12	6.98	6.85	6.73	6.61	6.49	6.38	6.27	6.16	6.06	5.96
6540	7.43	7.28	7.14	7.00	6.87	6.75	6.63	6.51	6.40	6.29	6.18	6.08	5.98
6560	7.45	7.30	7.16	7.02	6.89	6.77	6.65	6.53	6.42	6.31	6.20	6.10	6.00
6580	7.47	7.32	7.18	7.04	6.91	6.79	6.66	6.54	6.43	6.32	6.22	6.11	6.01
6600	7.49	7.34	7.20	7.06	6.93	6.81	6.68	6.56	6.45	6.34	6.24	6.13	6.03
6620	7.51	7.36	7.22	7.08	6.95	6.82	6.70	6.58	6.47	6.36	6.25	6.15	6.05
6640	7.53	7.38	7.24	7.10	6.97	6.84	6.71	6.59	6.48	6.37	6.27	6.16	6.06
6660	7.55	7.40	7.26	7.12	6.99	6.86	6.73	6.61	6.50	6.39	6.29	6.18	6.08
6680	7.57	7.42	7.28	7.14	7.01	6.88	6.75	6.63	6.52	6.41	6.30	6.20	6.10
6700	7.59	7.44	7.30	7.16	7.03	6.90	6.77	6.65	6.54	6.43	6.32	6.22	6.12
6720	7.61	7.46	7.31	7.17	7.04	6.91	6.79	6.67	6.56	6.44	6.33	6.23	6.13
6740	7.63	7.48	7.33	7.19	7.06	6.93	6.80	6.68	6.57	6.46	6.35	6.25	6.15
6760	7.65	7.50	7.35	7.21	7.08	6.95	6.82	6.70	6.59	6.48	6.37	6.27	6.17
6780	7.67	7.52	7.37	7.23	7.10	6.97	6.84	6.72	6.61	6.49	6.38	6.28	6.18
6800	7.69	7.54	7.39	7.25	7.12	6.99	6.86	6.74	6.63	6.51	6.40	6.30	6.20
6820	7.70	7.55	7.40	7.26	7.13	7.00	6.88	6.76	6.64	6.53	6.42	6.31	6.21
6840	7.72	7.57	7.42	7.28	7.15	7.02	6.89	6.77	6.66	6.54	6.43	6.33	6.23
6860	7.74	7.59	7.44	7.30	7.17	7.04	6.91	6.79	6.68	6.56	6.45	6.35	6.25
6880	7.76	7.61	7.46	7.32	7.19	7.06	6.93	6.81	6.69	6.58	6.47	6.36	6.26
6900	7.78	7.63	7.48	7.34	7.21	7.08	6.95	6.83	6.71	6.60	6.49	6.38	6.28
6920	7.80	7.65	7.50	7.36	7.22	7.09	6.97	6.85	6.73	6.61	6.50	6.39	6.29
6940	7.82	7.67	7.52	7.38	7.24	7.11	6.98	6.86	6.74	6.63	6.52	6.41	6.31
6960	7.84	7.69	7.54	7.40	7.26	7.13	7.00	6.88	6.76	6.65	6.54	6.43	6.33
6980	7.86	7.71	7.56	7.42	7.28	7.15	7.02	6.90	6.78	6.66	6.55	6.44	6.34
7000	7.88	7.73	7.58	7.44	7.30	7.17	7.04	6.92	6.80	6.68	6.57	6.46	6.36

XII.—REDUCTION TO SEA-LEVEL. ENGLISH.

Ft.	—30°	—20°	—10°	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
7000	7.88	7.73	7.58	7.44	7.30	7.17	7.04	6.92	6.80	6.68	6.57	6.46	6.36
7020	7.90	7.74	7.59	7.45	7.31	7.18	7.06	6.93	6.81	6.69	6.58	6.48	6.37
7040	7.92	7.76	7.61	7.47	7.33	7.20	7.07	6.95	6.83	6.71	6.60	6.49	6.39
7060	7.94	7.78	7.63	7.49	7.35	7.22	7.09	6.97	6.85	6.73	6.62	6.51	6.41
7080	7.96	7.80	7.65	7.51	7.37	7.24	7.11	6.98	6.86	6.74	6.63	6.53	6.42
7100	7.98	7.82	7.67	7.53	7.39	7.26	7.13	7.00	6.88	6.76	6.65	6.55	6.44
7120	7.99	7.84	7.69	7.54	7.40	7.27	7.14	7.02	6.90	6.78	6.67	6.56	6.45
7140	8.01	7.86	7.71	7.56	7.42	7.29	7.16	7.03	6.91	6.79	6.68	6.58	6.47
7160	8.03	7.88	7.73	7.58	7.44	7.31	7.18	7.05	6.93	6.81	6.70	6.60	6.49
7180	8.05	7.90	7.75	7.60	7.46	7.32	7.19	7.07	6.95	6.83	6.72	6.61	6.50
7200	8.07	7.92	7.77	7.62	7.48	7.34	7.21	7.09	6.97	6.85	6.74	6.63	6.52
7220	8.09	7.93	7.78	7.63	7.49	7.36	7.23	7.10	6.98	6.86	6.75	6.64	6.53
7240	8.11	7.95	7.80	7.65	7.51	7.37	7.24	7.12	7.00	6.88	6.77	6.66	6.55
7260	8.13	7.97	7.82	7.67	7.53	7.39	7.26	7.14	7.02	6.90	6.79	6.68	6.57
7280	8.15	7.99	7.84	7.69	7.55	7.41	7.28	7.15	7.03	6.91	6.80	6.69	6.58
7300	8.17	8.01	7.86	7.71	7.57	7.43	7.30	7.17	7.05	6.93	6.82	6.71	6.60
7320	8.18	8.02	7.87	7.72	7.58	7.45	7.32	7.19	7.07	6.95	6.83	6.72	6.61
7340	8.20	8.04	7.89	7.74	7.60	7.46	7.33	7.20	7.08	6.96	6.85	6.74	6.63
7360	8.22	8.06	7.91	7.76	7.62	7.48	7.35	7.22	7.10	6.98	6.87	6.76	6.65
7380	8.24	8.08	7.93	7.78	7.64	7.50	7.37	7.24	7.12	7.00	6.88	6.77	6.66
7400	8.26	8.10	7.95	7.80	7.66	7.52	7.39	7.26	7.14	7.02	6.90	6.79	6.68
7420	8.28	8.12	7.96	7.81	7.67	7.54	7.40	7.27	7.15	7.03	6.91	6.80	6.69
7440	8.30	8.14	7.98	7.83	7.69	7.55	7.42	7.29	7.17	7.05	6.93	6.82	6.71
7460	8.32	8.16	8.00	7.85	7.71	7.57	7.44	7.31	7.19	7.07	6.95	6.84	6.73
7480	8.34	8.18	8.02	7.87	7.73	7.59	7.45	7.32	7.20	7.08	6.96	6.85	6.74
7500	8.36	8.20	8.04	7.89	7.75	7.61	7.47	7.34	7.22	7.10	6.98	6.87	6.76
7520	8.37	8.21	8.05	7.90	7.76	7.62	7.49	7.36	7.23	7.11	6.99	6.88	6.77
7540	8.39	8.23	8.07	7.92	7.78	7.64	7.50	7.37	7.25	7.13	7.01	6.90	6.79
7560	8.41	8.25	8.09	7.94	7.80	7.66	7.52	7.39	7.27	7.15	7.03	6.92	6.81
7580	8.43	8.27	8.11	7.96	7.81	7.67	7.54	7.41	7.28	7.16	7.04	6.93	6.82
7600	8.45	8.29	8.13	7.98	7.83	7.69	7.56	7.43	7.30	7.18	7.06	6.95	6.84
7620	8.47	8.30	8.14	7.99	7.85	7.71	7.58	7.44	7.31	7.19	7.07	6.96	6.85
7640	8.49	8.32	8.16	8.01	7.86	7.72	7.59	7.46	7.33	7.21	7.09	6.98	6.87
7660	8.51	8.34	8.18	8.03	7.88	7.74	7.61	7.48	7.35	7.23	7.11	7.00	6.89
7680	8.53	8.36	8.20	8.05	7.90	7.76	7.63	7.49	7.36	7.24	7.12	7.01	6.90
7700	8.55	8.38	8.22	8.07	7.92	7.78	7.65	7.51	7.38	7.26	7.14	7.03	6.92
7720	8.56	8.39	8.23	8.08	7.94	7.80	7.66	7.53	7.40	7.27	7.15	7.04	6.93
7740	8.58	8.41	8.25	8.10	7.95	7.81	7.68	7.54	7.41	7.29	7.17	7.06	6.95
7760	8.60	8.43	8.27	8.12	7.97	7.83	7.70	7.56	7.43	7.31	7.19	7.08	6.96
7780	8.62	8.45	8.29	8.14	7.99	7.85	7.71	7.58	7.45	7.32	7.20	7.09	6.98
7800	8.64	8.47	8.31	8.16	8.01	7.87	7.73	7.60	7.47	7.34	7.22	7.11	6.99
7820	8.65	8.48	8.32	8.17	8.03	7.88	7.74	7.61	7.48	7.35	7.23	7.12	7.00
7840	8.67	8.50	8.34	8.19	8.04	7.90	7.76	7.63	7.50	7.37	7.25	7.14	7.02
7860	8.69	8.52	8.36	8.21	8.06	7.92	7.78	7.65	7.52	7.39	7.27	7.15	7.04
7880	8.71	8.54	8.38	8.23	8.08	7.93	7.79	7.66	7.53	7.40	7.28	7.17	7.05
7900	8.73	8.56	8.40	8.25	8.10	7.95	7.81	7.68	7.55	7.42	7.30	7.18	7.07
7920	8.74	8.57	8.41	8.26	8.12	7.97	7.83	7.70	7.57	7.44	7.31	7.19	7.08
7940	8.76	8.59	8.43	8.28	8.13	7.98	7.84	7.71	7.58	7.45	7.33	7.21	7.10
7960	8.78	8.61	8.45	8.30	8.15	8.00	7.86	7.73	7.60	7.47	7.35	7.23	7.12
7980	8.80	8.63	8.47	8.32	8.17	8.02	7.88	7.75	7.62	7.49	7.36	7.24	7.13
8000	8.82	8.65	8.49	8.34	8.19	8.04	7.90	7.76	7.63	7.51	7.38	7.26	7.15

TABLE XII a.—COLUMN OF AIR EQUAL TO .1 INCH IN THE BAROMETER.

(Enlarged from Guyot.)

Temperature Fahr.

Pressure.	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°
Inches.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
22.0	116	118	119	120	122	123	124	126	127	128	130	131	132	134
22.5	113	115	116	117	119	120	121	123	124	125	127	128	129	131
23.0	111	112	114	115	116	118	119	120	121	123	124	125	126	128
23.5	109	110	111	112	114	115	116	117	119	120	121	122	124	125
24.0	106	108	109	110	111	113	114	115	116	117	119	120	121	122
24.5	104	106	107	108	109	110	111	113	114	115	116	118	119	120
25.0	102	104	105	106	107	108	109	110	112	113	114	115	116	117
25.5	100	102	103	104	105	106	107	108	109	111	112	113	114	115
26.0	98	100	101	102	103	104	105	106	107	108	110	111	112	113
26.5	96	98	99	100	101	102	103	104	105	106	108	109	110	111
27.0	94	96	97	98	99	100	101	102	103	104	106	107	108	109
27.5	92	94	95	96	97	98	99	100	101	102	104	105	106	107
28.0	91	92	93	94	95	96	98	99	100	101	102	103	104	105
28.5	90	91	92	93	94	95	96	97	98	99	100	101	102	103
29.0	88	89	90	91	92	93	94	95	96	97	98	99	100	101
29.5	87	88	89	90	91	92	93	94	95	96	97	98	99	100
30.0	85	86	87	88	89	90	91	92	93	94	95	96	97	98
30.5	84	85	86	87	88	89	90	91	92	93	94	95	96	97

XII b.—COLUMN OF AIR EQUAL TO 1 MILLIMETRE IN THE BAROMETER.

Temperature Cent.

Pressure.	— 8°	— 4°	0°	4°	8°	12°	16°	20°	24°	28°	32°	36°
mm.	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.	m.
560	13.8	14.0	14.3	14.5	14.7	14.9	15.2	15.4	15.6	15.8	16.0	16.3
570	13.6	13.8	14.0	14.2	14.5	14.7	14.9	15.2	15.4	15.6	15.8	16.0
580	13.4	13.6	13.8	14.0	14.2	14.4	14.7	14.9	15.1	15.3	15.6	15.8
590	13.1	13.4	13.6	13.8	14.0	14.2	14.4	14.6	14.8	15.1	15.3	15.5
600	12.9	13.1	13.3	13.5	13.8	14.0	14.2	14.4	14.6	14.8	15.0	15.2
610	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.2	14.4	14.6	14.8	15.0
620	12.5	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1	14.3	14.6	14.8
630	12.3	12.5	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1	14.3	14.5
640	12.1	12.3	12.5	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1	14.3
650	11.9	12.1	12.3	12.5	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1
660	11.8	11.9	12.1	12.3	12.5	12.7	12.9	13.1	13.3	13.5	13.7	13.9
670	11.6	11.8	11.9	12.1	12 3	12.5	12.7	12.9	13.1	13.3	13.5	13.7
680	11.4	11.6	11.8	11.9	12 1	12.3	12 5	12.7	12 9	13.1	13.3	13.5
690	11.3	11.4	11.6	11.8	12.0	12.1	12.3	12.5	12.7	12.9	13.1	13.4
700	11 1	11.3	11.4	11.6	11.8	12.0	12.2	12.3	12.5	12.7	12.9	13.2
710	10.9	11.1	11.3	11.4	11.6	11.8	12.0	12.2	12.3	12 5	12.7	13.0
720	10.8	10.9	11.1	11.3	11.5	11.6	11.8	12.0	12.2	12.4	12.5	12.8
730	10.7	10.8	10.9	11.1	11.3	11.5	11.6	11.8	12.0	12.2	12.8	12.6
740	10.5	10.7	10.8	11.0	11.2	11.3	11.5	11.7	11.8	12.0	12.2	12.4
750	10.3	10.5	10.7	10.8	11.0	11.2	11.3	11.5	11.7	11.9	12.1	12.3
760	10.2	10.3	10.5	10.7	10.8	11.0	11.2	11.4	11.5	11.7	11.9	12.1

TABLE XIII.—REDUCTION OF BAROMETER READINGS TO SEA-LEVEL. METRICAL.

(Original.)

Metres.	—10°	—5°	0°	5°	10°	15°	20°	25°	30°	35°
	mm.	mm.	mm.	mm.	mm,	mm.	mm.	mm.	mm.	mm.
10	1.0	1.0	1.0	1.0	1.0	1.0	.9	.9	.9	.9
20	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8
30	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.7
40	3.9	3.8	3.8	3.8	3.7	3.7	3.7	3.6	3.6	3.6
50	4.9	4.8	4.8	4.7	4.6	4.6	4.5	4.5	4.4	4.4
60	5.9	5.8	5.7	5.6	5.6	5.5	5.4	5.3	5.3	5.2
70	6.8	6.7	6.6	6.5	6.4	6.4	6.3	6.2	6.1	6.1
80	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.0	7.0
90	8.8	8.6	8.5	8.3	8.2	8.1	8.0	7.9	7.8	7.7
100	9.8	9.6	9.4	9.2	9.1	8.9	8.8	8.6	8.5	8.4
110	10.8	10.5	10.3	10.1	9.9	9.8	9.6	9.5	9.3	9.2
120	11.7	11.5	11.2	11.0	10.8	10.7	10.5	10.4	10.2	10.1
130	12.7	12.4	12.2	12.0	11.8	11.6	11.4	11.3	11.1	11.0
140	13.6	13.4	13.1	12.9	12.7	12.5	12.3	12.1	11.9	11.8
150	14.6	14.3	14.1	13.8	13.6	13.4	13.2	13.0	12.8	12.6
160	15.6	15.3	15.0	14.8	14.5	14.2	14.0	13.8	13.6	13.4
170	16.5	16.2	15.9	15.7	15.4	15.1	14.9	14.7	14.5	14.3
180	17.5	17.2	16.9	16.6	16.3	16.0	15.8	15.5	15.3	15.1
190	18.4	18.1	17.8	17.5	17.2	16.9	16.6	16.4	16.1	15.8
200	19.4	19.1	18.7	18.4	18.1	17.8	17.5	17.2	16.9	16.6
210	20.4	20.0	19.7	19.3	19.0	18.7	18.4	18.1	17.8	17.5
220	21.3	21.0	20.6	20.3	19.9	19.6	19.2	18.9	18.6	18.4
230	22.3	21.9	21.5	21.2	20.8	20.4	20.1	19.7	19.4	19.2
240	23.2	22.8	22.4	22.1	21.7	21.3	21.0	20.6	20.3	20.0
250	24.2	23.8	23.4	23.0	22.6	22.2	21.8	21.5	21.1	20.8
260	25.1	24.7	24.3	23.8	23.4	23.0	22.6	22.3	21.9	21.6
270	26.1	25.6	25.2	24.7	24.3	23.9	23.5	23.1	22.7	22.4
280	27.1	26.6	26.1	25.6	25.2	24.8	24.4	24.0	23.6	23.2
290	28.0	27.5	27.0	26.5	26.1	25.7	25.2	24.8	24.4	24.0
300	29.0	28.4	27.9	27.4	27.0	26.5	26.1	25.6	25.2	24.8
310	30.0	29.4	28.8	28.3	27.9	27.4	26.9	26.5	26.1	25.6
320	30.9	30.3	29.7	29.2	28.7	28.3	27.8	27.3	26.9	26.4
330	31.9	31.2	30.6	30.1	29.6	29.1	28.6	28.1	27.7	27.3
340	32.8	32.2	31.6	31.0	30.5	30.0	29.5	29.0	28.5	28.1
350	33.8	33.1	32.5	31.9	31.3	30.8	30.3	29.8	29.3	28.9
360	34.7	34.0	33.4	32.8	32.2	31.7	31.2	30.6	30.1	29.7
370	35.6	34.9	34.3	33.7	33.1	32.6	32.1	31.5	31.0	30.5
380	36.6	35.9	35.2	34.6	34.0	33.4	32.9	32.4	31.8	31.3
390	37.5	36.8	36.1	35.5	34.9	34.3	33.8	33.2	32.6	32.1
400	38.4	37.7	37.0	36.4	35.7	35.1	34.6	34.0	33.4	32.9
410	39.4	38.6	37.9	37.3	36.6	36.0	35.4	34.8	34.2	33.7
420	40.3	39.5	38.8	38.1	37.4	36.8	36.2	35.6	35.0	34.5
430	41.2	40.4	39.7	39.0	38.3	37.7	37.1	36.4	35.8	35.3
440	42.2	41.4	40.6	39.9	39.2	38.5	37.9	37.3	36.7	36.1
450	43.1	42.3	41.5	40.8	40.1	39.4	38.8	38.2	37.5	36.9
460	44.0	43.2	42.4	41.7	40.9	40.2	39.6	39.0	38.3	37.7
470	45.0	44.1	43.3	42.5	41.8	41.1	40.5	39.8	39.1	38.5
480	45.9	45.0	44.2	43.4	42.6	41.9	41.3	40.6	39.9	39.3
490	46.8	45.9	45.1	44.3	43.5	42.8	42.1	41.4	40.7	40.1
500	47.7	46.8	46.0	45.2	44.4	43.6	42.9	42.2	41.5	40.9

XIII.—REDUCTION TO SEA-LEVEL. METRICAL.

Metres.	— 10°	— 5°	0°	5°	10°	15°	20°	25°	30°	35°
	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
500	47.7	46.8	46.0	45.2	44.4	43.6	42.9	42.2	41.5	40.9
510	48.6	47.7	46.9	46.1	45.3	44.5	43.8	43.1	42.4	41.7
520	49.5	48.6	47.8	47.0	46.1	45.3	44.6	43 9	43.2	42.5
530	50.4	49.5	48.7	47.8	47.0	46.2	45.4	44.7	44.0	43.3
540	51.3	50.4	49.5	48.7	47.8	47.0	46.3	45.5	44.8	44.1
550	52.3	51.3	50.4	49.6	48.7	47.9	47.1	46.3	45.6	44.8
560	53.2	52.2	51.3	50.4	49.5	48.7	47.9	47.2	46.4	45.6
570	54.1	53.1	52.2	51.3	50.4	49.6	48.8	48.0	47.2	46.4
580	55.0	54.0	53.1	52.2	51.3	50.4	49.6	48.8	48.0	47.2
590	55.9	54.9	53.9	53.0	52.1	51.3	50.4	49.6	48.8	48.0
600	56.8	55.8	54.8	53.9	53.0	52.1	51.2	50 4	49.6	48.8
610	57.7	56.7	55.7	54.8	53.8	52.9	52.1	51.2	50.4	49.6
620	58.6	57.6	56.6	55.6	54.7	53.8	52.9	52.0	51.2	50.3
630	59.5	58.5	57.5	56.5	55.5	54.6	53.7	52.8	52.0	51.1
640	60.4	59.4	58.4	57.4	56.4	55.4	54.5	53.6	52 8	51.9
650	61.4	60.3	59.2	58.2	57.2	56.3	55.3	54.4	53.5	52.7
660	62.3	61.2	60.1	59.1	58.1	57.1	56.1	55.2	54.3	53.4
670	63.2	62.1	61.0	60.0	58.9	57.9	56.9	56.0	55.1	54.2
680	64.1	62.9	61.8	60.8	59.8	58.8	57.8	56 8	55.9	55.0
690	65.0	63.8	62.7	61.7	60.6	59.6	58.6	57.6	56.7	55.8
700	65.9	64.7	63.6	62.5	61.4	60.4	59.4	58.4	57.5	56.6
710	66.8	65.6	64.5	63.4	62.3	61.2	60.2	59.2	58.3	57.4
720	67.7	66.5	65.3	64.2	63.1	62.1	61.0	60.0	59.1	58.2
730	68.6	67.4	66.2	65.1	64.0	62.9	61.8	60.8	59.9	58.9
740	69.4	68.2	67.0	65.9	64.8	63.7	62.6	61.6	60.7	59.7
750	70.3	69.1	67.9	66.8	65.7	64.6	63.5	62.4	61.4	60.5
760	71.2	70.0	68.8	67.6	66.5	65.4	64.3	63.2	62.2	61.2
770	72.1	70.9	69.7	68.5	67.3	66.2	65.1	64.0	63.0	62.0
780	73.0	71.7	70.5	69.3	68.2	67.0	65.9	64.8	63.8	62.8
790	73.9	72.6	71.4	70.2	69.0	67.8	66.7	65.6	64.6	63.6
800	74.8	73.5	72.2	71.0	69.8	68.6	67.5	66.4	65.4	64.4
810	75.7	74.4	73.1	71.8	70.6	69.4	68.3	67.2	66.2	65.2
820	76.5	75.2	73 9	72.6	71.4	70.2	69.1	68.0	66.9	65.9
830	77.4	76.1	74.8	73.5	72.3	71.1	69.9	68.8	67.7	66.7
840	78.3	77.0	75.7	74.4	73.1	71.9	70.7	69.6	68.5	67.5
850	79.2	77.8	76.5	75.2	74.0	72.7	71.5	70.3	69.2	68.2
860	80.1	78.7	77.4	76.1	74.8	73.5	72.3	71.1	70.0	69.0
870	81.0	79.6	78.2	76.9	75.6	74.3	73.1	71.9	70.8	69.7
880	81.8	80.4	79.1	77.8	76.4	75.1	73.9	72.7	71.6	70.5
890	82.7	81.3	80.0	78.6	77.2	75.9	74.7	73.5	72.3	71.2
900	83.6	82.2	80.8	79.4	78.0	76.7	75.5	74.3	73.1	72.0
910	84.5	83.0	81.6	80.2	78.9	77.6	76.3	75.1	73.9	72.8
920	85.4	83.9	82.5	81.1	79.7	78.4	77.1	75.9	74.7	73.5
930	86.2	84.7	83.3	81.9	80.5	79.2	77.9	76.6	75.4	74.3
940	87.1	85.6	84.1	82.7	81.4	80.0	78.7	77.4	76 2	75.1
950	87.9	86.5	85.0	83.6	82.2	80.8	79.5	78.2	77.0	75.8
960	88.8	87.3	85.8	84.4	83.0	81.6	80.2	78.9	77.7	76.6
970	89.7	88.2	86.7	85.2	83.8	82.4	81.0	79.7	78.5	77.4
980	90.5	89.0	87.5	86.0	84.6	83.2	81.8	80.5	79.3	78.1
990	91.4	89.8	88.3	86.8	85.4	84.0	82.6	81.3	80.1	78.9
1000	92.3	90.7	89.1	87.6	86.2	84.8	83.4	82.1	80.8	79.6

XIII.—REDUCTION TO SEA-LEVEL. METRICAL.

Metres.	—10°	—5°	0°	5°	10°	15°	20°	25°	30°	35°
	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
1000	92.3	90.7	89.1	87.6	86.2	84.8	83.4	82.1	80.8	79 6
1010	93.2	91.6	90.0	88.5	87.0	85.6	84.2	82.9	81.6	80.4
1020	94.0	92.4	90.8	89.3	87.8	86.4	85.0	83.7	82.4	81.1
1030	94.9	93.3	91.7	90.1	88.6	87.2	85.8	84.5	83.1	81.8
1040	95.8	94.1	92.5	91.0	89.5	88.0	86.6	85.2	83.9	82.6
1050	96.6	95.0	93.4	91.8	90.3	88.8	87.4	86.0	84.6	83 3
1060	97.5	95.8	94.2	92.6	91.1	89.6	88.2	86.8	85.4	84.1
1070	98.3	96.7	95.0	93.4	91.9	90.4	89.0	87.6	86.2	84.8
1080	99.2	97.5	95.9	94.2	92.6	91.1	89.7	88.3	86.9	85.5
1090	100.0	98.3	96.7	95.0	93.4	91.9	90.5	89.1	87.7	86.3
1100	100.9	99.2	97.5	95.8	94.2	92.7	91.2	89.8	88.4	87.0
1110	101.7	100.0	98.4	96.7	95.1	93.5	92.0	90.6	89.2	87.8
1120	102.6	100.9	99.2	97.5	95.9	94.3	92.8	91.4	89.9	88 5
1130	103.4	101.7	100.0	98.3	96.7	95.1	93.6	92.1	90.7	89.2
1140	104.3	102.5	100.8	99.1	97.5	95.9	94.4	92.9	91.4	90.0
1150	105.1	103.4	101.6	99.9	98.3	96.7	95.2	93.7	92.2	90.7
1160	106.0	104.2	102.4	100.7	99.1	97.5	96.0	94.5	93.0	91.5
1170	106.8	105.0	103.3	101.5	99.8	98.2	96.7	95.2	93.7	92.2
1180	107.7	105.9	104.1	102.3	100.6	99.0	97.5	96.0	94.5	93.0
1190	108.5	106 7	104.9	103.1	101.4	99.8	98.2	96.7	95.2	93.7
1200	109.4	107.5	105.7	103.9	102.2	100.6	99.0	97.4	95.9	94.4
1210	110.2	108.4	106.5	104.7	103.0	101.4	99.8	98.2	96.7	95.2
1220	111.1	109.2	107.4	105.6	103.9	102.2	100.6	99.0	97.4	95.9
1230	111.9	110.1	108.2	106.4	104.7	103.0	101.4	99.8	98.2	96.6
1240	112.8	110.9	109.0	107.2	105.4	103.7	102.1	100.5	98.9	97.4
1250	113.6	111.7	109.8	108.0	106.2	104.5	102.9	101.3	99.7	98.1
1260	114.4	112.5	110.6	108.8	107.0	105.3	103.6	102.0	100.4	98.8
1270	115.3	113.3	111.4	109.5	107.7	106.0	104.4	102.7	101.1	99.6
1280	116.1	114.1	112.2	110.3	108.5	106.8	105.1	103.5	101.9	100.3
1290	117.0	115.0	113.0	111.1	109.3	107.5	105.8	104.2	102.6	101.0
1300	117.8	115.8	113.8	111.9	110.1	108.3	106.6	104.9	103.3	101.8
1310	118.6	116.6	114.6	112.7	110.9	109.1	107.4	105.7	104.1	102.5
1320	119.5	117.4	115.4	113.5	111.7	109.9	108.2	106.5	104.9	103.3
1330	120.3	118.2	116.2	114.3	112.5	110.7	109.0	107.3	105.6	104.0
1340	121.1	119.0	117.0	115.1	113.3	111.5	109.8	108.1	106.4	104.7
1350	121.9	119.8	117.8	115.9	114.0	112.2	110.5	108.8	107.1	105.4
1360	122.8	120.7	118.6	116.7	114.8	113.0	111.3	109.6	107.9	106.2
1370	123.6	121.5	119.4	117.4	115.5	113.7	112.0	110.3	108.6	106.9
1380	124.4	122.3	120.2	118.2	116.3	114.5	112.7	111.0	109.3	107.6
1390	125.2	123.1	121.0	119.0	117.1	115.3	113.5	111.7	110.0	108.3
1400	126.0	123.9	121.8	119.8	117.9	116.0	114.2	112.4	110.7	109.0
1410	126.9	124.7	122.6	120.6	118.7	116.8	115.0	113.2	111.5	109.8
1420	127.7	125.5	123.4	121.4	119.5	117.6	115.8	114.0	112.2	110.5
1430	128.5	126.3	124.2	122.2	120.2	118.3	116.5	114.7	113.0	111.2
1440	129.3	127.1	125.0	123.0	121.0	119.1	117.3	115.5	113.7	111.9
1450	130.2	128.0	125.8	123.7	121.7	119.8	118.0	116.2	114.4	112.6
1460	131.0	128.8	126.6	124.5	122.5	120.6	118.8	117.0	115.2	113.4
1470	131.8	129.6	127.4	125.3	123.3	121.4	119.5	117.7	115.9	114.1
1480	132.6	130.3	128.1	126.0	124.0	122.1	120.2	118.4	116.6	114.8
1490	133.4	131.1	128.9	126.8	124.8	122.8	120.9	119.1	117.3	115.5
1500	134.2	131.9	129.7	127.6	125.5	123.5	121.6	119.7	117.9	116.2

XIII.—REDUCTION TO SEA-LEVEL. METRICAL.

Metres.	−10°	−5°	0°	5°	10°	15°	20°	25°	30°	35°
	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
1500	134.2	131.9	129.7	127.6	125.5	123.5	121.6	119.7	117.9	116.2
1510	135.0	132.7	130.5	128.4	126.3	124.3	122.4	120.5	118.7	116.9
1520	135.8	133.5	131.3	129.2	127.1	125.1	123.1	121.2	119.4	117.6
1530	136.6	134.3	132.1	130.0	127.9	125.8	123.8	121.9	120.1	118.3
1540	137.4	135.1	132.9	130.8	128.7	126.6	124.6	122.7	120.9	119.0
1550	138.2	136.9	133.7	131.5	129.4	127.4	125.4	123.5	121.6	119.7
1560	139.0	136.7	134.5	132.3	130.2	128.1	126.1	124.2	122.3	120.4
1570	139.8	137.5	135.2	133.0	130.9	128.8	126.8	124.9	123.0	121.1
1580	140.6	138.3	136.0	133.8	131.7	129.6	127.6	125.6	123.7	121.8
1590	141.4	139.1	136.8	134.6	132.4	130.3	128.3	126.3	124.4	122.5
1600	142.2	139.8	137.5	135.3	133.1	131.0	129.0	127.0	125.1	123.2
1610	143.0	140.6	138.3	136.1	133.9	131.8	129.8	127.8	125.8	123.9
1620	143.8	141.4	139.1	136.8	134.6	132.5	130.5	128.5	126.5	124.6
1630	144.6	142.2	139.9	137.6	135.4	133.3	131.2	129.2	127.2	125.3
1640	145.4	143.0	140.6	138.3	136.1	134.0	132.0	130.0	127.9	126.0
1650	146.2	143.8	141.4	139.1	136.9	134.8	132.7	130.7	128.7	126.7
1660	147.0	144.6	142.2	139.9	137.7	135.5	133.4	131.4	129.4	127.4
1670	147.8	145.3	142.9	140.6	138.4	136.2	134.1	132.1	130.1	128.1
1680	148.6	146.1	143.7	141.4	139.2	137.0	134.9	132.8	130.8	128.8
1690	149.4	146.9	144.5	142.2	139.9	137.7	135.6	133.5	131.5	129.5
1700	150.2	147.7	145.3	142.9	140.6	138.4	136.3	134.2	132.2	130.2
1710	151.0	148.5	146.1	143.7	141.4	139.2	137.1	135.0	132.9	130.9
1720	151.8	149.3	146.8	144.4	142.1	139.9	137.8	135.7	133.6	131.6
1730	152.5	150.0	147.6	145.2	142.9	140.7	138.5	136.4	134.3	132.3
1740	153.3	150.8	148.3	145.9	143.6	141.4	139.2	137.1	135.0	133.0
1750	154.1	151.6	149.1	146.7	144.4	142.1	139.9	137.8	135.7	133.7
1760	154.9	152.4	149.9	147.5	145.2	142.9	140.7	138.5	136.4	134.4
1770	155.6	153.1	150.6	148.2	145.9	143.6	141.4	139.2	137.1	135.1
1780	156.4	153.9	151.4	149.0	146.6	144.3	142.1	139.9	137.8	135.8
1790	157.2	154.6	152.1	149.7	147.3	145.0	142.8	140.6	138.5	136.5
1800	158.0	155.4	152.9	150.4	148.0	145.7	143.5	141.3	139.2	137.2
1810	158.8	156.2	153.7	151.2	148.8	146.4	144.2	142.0	139.9	137.8
1820	159.6	157.0	154.4	151.9	149.5	147.2	144.9	142.7	140.6	138.5
1830	160.3	157.7	155.2	152.7	150.3	147.9	145.6	143.4	141.3	139.2
1840	161.1	158.5	155.9	153.4	151.0	148.6	146.3	144.1	142.0	139.9
1850	161.9	159.3	156.7	154.2	151.8	149.4	147.1	144.8	142.6	140.5
1860	162.7	160.0	157.4	154.9	152.5	150.1	147.8	145.5	143.3	141.2
1870	163.4	160.8	158.2	155.7	153.2	150.8	148.5	146.2	144.0	141.9
1880	164.2	161.5	158.9	156.4	153.9	151.5	149.2	146.9	144.7	142.6
1890	165.0	162.3	159.7	157.1	154.6	152.2	149.9	147.6	145.4	143.3
1900	165.8	163.1	160.4	157.8	155.3	152.9	150.6	148.3	146.1	144.0
1910	166.6	163.8	161.1	158.5	156.0	153.6	151.3	149.0	146.8	144.7
1920	167.3	164.6	161.9	159.3	156.8	154.4	152.0	149.7	147.5	145.3
1930	168.1	165.3	162.6	160.0	157.5	155.1	152.7	150.4	148.2	146.0
1940	168.8	166.1	163.4	160.8	158.3	155.8	153.4	151.1	148.9	146.7
1950	169.6	166.8	164.1	161.5	159.0	156.5	154.1	151.8	149.6	147.4
1960	170.4	167.6	164.9	162.3	159.7	157.2	154.8	152.5	150.3	148.1
1970	171.1	168.3	165.6	163.0	160.4	157.9	155.5	153.2	151.0	148.8
1980	171.9	169.1	166.4	163.8	161.2	158.7	156.3	153.9	151.6	149.4
1990	172.7	169.9	167.2	164.5	161.9	159.4	157.0	154.6	152.3	150.1
2000	173.4	170.6	167.9	165.2	162.6	160.1	157.7	155.3	153.0	150.8

TABLE XIV.—GRAVITY CORRECTION.

In Inches and Millimetres.

To reduce readings of the mercurial barometer to standard gravity at sea-level in latitude 45°. Computed for thirty inches.

(SIGNAL OFFICE.)

Lat.			Lat.	Lat.			Lat.	Lat.			Lat.
—	in.	mm.	+	—	in.	mm.	+	—	in.	mm.	+
0°	.078	1.98	90°	15°	.067	1.70	75°	30°	.039	.99	60°
1	.078	1.97	89	16	.066	1.67	74	31	.036	.92	59
2	.078	1.97	88	17	.064	1.63	73	32	.034	.86	58
3	.077	1.96	87	18	.063	1.59	72	33	.032	.80	57
4	.077	1.95	86	19	.061	1.55	71	34	.029	.74	56
5	.077	1.94	85	20	.060	1.51	70	35	.027	67	55
6	.076	1.93	84	21	.058	1.47	69	36	.024	.60	54
7	.075	1.91	83	22	.056	1.42	68	37	.021	.53	53
8	.075	1.90	82	23	.054	1.37	67	38	.019	.47	52
9	.074	1.88	81	24	.052	1.32	66	39	.016	41	51
10	.073	1.85	80	25	.050	1.27	65	40	.013	.34	50
11	.072	1.83	79	26	.048	1.22	64	41	.011	.28	49
12	.071	1.80	78	27	.046	1.17	63	42	.008	.21	48
13	.070	1.77	77	28	.043	1.11	62	43	.005	.14	47
14	.069	1.74	76	29	.041	1.05	61	44	.003	.07	46
15	.067	1.70	75	30	.039	.99	60	45	.000	.00	45

N. B.—In this table the correction is always *minus* for latitudes 0° to 45°, and *plus* from 45° to 90°.

TABLE XV.—BAROMETRIC PRESSURES CORRESPONDING TO THE TEMPERATURE OF BOILING WATER. ENGLISH.

(Regnault and Moritz. See Guyot, p. 444.)

F.	0	1	2	3	4	5	6	7	8	9	F.	Ap'x'e height
°	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.		Feet.
185	17.05	17.08	17.12	17.16	17.20	17.23	17.27	17.31	17.35	17.39	185	15230
186	17.42	17.46	17.50	17.54	17.58	17.61	17.65	17.69	17.73	17.77	186	14670
187	17.81	17.84	17.88	17.92	17.96	18.00	18.04	18.08	18.12	18.16	187	14110
188	18.20	18.24	18.27	18.31	18.35	18.39	18.43	18.47	18.51	18.55	188	13550
189	18.59	18.63	18.67	18.71	18.75	18.79	18.83	18.87	18.91	18.95	189	12990
190	19.00	19.04	19.08	19.12	19.16	19.20	19.24	19.28	19.32	19.36	190	12430
191	19.41	19.45	19.49	19.53	19.57	19.61	19.66	19.70	19.74	19.78	191	11870
192	19.82	19.87	19.91	19.95	19.99	20.04	20.08	20.12	20.17	20.21	192	11310
193	20.25	20.29	20.34	20.38	20.42	20.47	20.51	20.55	20.60	20.64	193	10750
194	20.68	20.73	20.77	20.82	20.86	20.90	20.95	20.99	21.04	21.08	194	10190
195	21.13	21.17	21.22	21.26	21.30	21.35	21.39	21.44	21.48	21.53	195	9630
196	21.58	21.62	21.67	21.71	21.76	21.80	21.85	21.89	21.94	21.99	196	9070
197	22.03	22.08	22.12	22.17	22.22	22.26	22.31	22.36	22.40	22.45	197	8510
198	22.50	22.54	22.59	22.64	22.69	22.73	22.78	22.83	22.88	22.92	198	7950
199	22.97	23.02	23.07	23.11	23.16	23.21	23.26	23.31	23.36	23.40	199	7390
200	23.45	23.50	23.55	23.60	23.65	23.70	23.75	23.80	23.85	23.89	200	6830
201	23.94	23.99	24.04	24.09	24.14	24.19	24.24	24.29	24.34	24.39	201	6270
202	24.44	24.49	24.54	24.59	24.64	24.69	24.74	24.80	24.85	24.90	202	5700
203	24.95	25.00	25.05	25.10	25.15	25.21	25.26	25.31	25.36	25.41	203	5140
204	25.46	25.52	25.57	25.62	25.67	25.73	25.78	25.83	25.88	25.94	204	4580
205	25.99	26.04	26.10	26.15	26.20	26.26	26.31	26.36	26.42	26.47	205	4020
206	26.52	26.58	26.63	26.68	26.74	26.79	26.85	26.90	26.96	27.01	206	3460
207	27.07	27.12	27.18	27.23	27.29	27.34	27.40	27.45	27.51	27.56	207	2890
208	27.62	27.67	27.73	27.79	27.84	27.90	27.95	28.01	28.07	28.12	208	2330
209	28.18	28.24	28.29	28.35	28.41	28.46	28.52	28.58	28.64	28.69	209	1760
210	28.75	28.81	28.87	28.92	28.98	29.04	29.10	29.16	29.21	29.27	210	1200
211	29.33	29.39	29.45	29.51	29.57	29.62	29.68	29.74	29.80	29.86	211	640
212	29.92	29.98	30.04	30.10	30.16	30.22	30.28	30.34	30.40	30.46	212	80

TABLE XVI.—BAROMETRIC PRESSURES CORRESPONDING TO THE TEMPERATURE OF BOILING WATER. METRICAL.

(Regnault and Moritz. See Guyot, p. 442.)

C.	0	.1	.2	.3	.4	.5	.6	.7	.8	.9
°	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
80	354.6	356.1	357.5	359.0	360.4	361.9	363.3	364.8	366.3	367.8
81	369.3	370.8	372.3	373.8	375.3	376.8	378.3	379.8	381.3	382.9
82	384.4	385.9	387.5	389.0	390.6	392.2	393.7	395.3	396.9	398.5
83	400.1	401.7	403.3	404.9	406.5	408.1	409.7	411.3	413.0	414.6
84	416.3	417.9	419.6	421.2	422.9	424.6	426.2	427.9	429.6	431.3
85	433.0	434.7	436.4	438.1	439.9	441.6	443.3	445.1	446.8	448.6
86	450.3	452.1	453.8	455.6	457.4	459.2	461.0	462.8	464.6	466.4
87	468.2	470.0	471.8	473.7	475.5	477.3	479.2	481.0	482.9	484.8
88	486.6	488.5	490.4	492.3	494.2	496.1	498.0	499.9	501.8	503.8
89	505.7	507.6	509.6	511.5	513.5	515.5	517.4	519.4	521.4	523.4
90	525.4	527.4	529.4	531.4	533.4	535.5	537.5	539.6	541.6	543.7
91	545.7	547.8	549.9	551.9	554.0	556.1	558.2	560.3	562.4	564.6
92	566.7	568.8	571.0	573.1	575.3	577.4	579.6	581.8	584.0	586.2
93	588.3	590.5	592.7	595.0	597.2	599.4	601.6	603.9	606.1	608.4
94	610.7	612.9	615.2	617.5	619.8	622.1	624.4	626.7	629.0	631.4
95	633.7	636.0	638.4	640.7	643.1	645.5	647.9	650.2	652.6	655.0
96	657.4	659.9	662.3	664.7	667.1	669.6	672.0	674.5	677.0	679.4
97	681.9	684.4	686.9	689.4	691.9	694.5	697.0	699.5	702.1	704.6
98	707.2	709.7	712.3	714.9	717.5	720.1	722.7	725.3	727.9	730.5
99	733.2	735.8	738.5	741.2	743.8	746.5	749.2	751.9	754.6	757.3
100	760.0	762.7	765.5	768.2	770.9	773.7	776.5	779.2	782.0	784.8

XVII-XXIII.—HUMIDITY TABLES.

TABLE XVII.—VAPOR PRESSURE. ENGLISH.

(Regnault and Broch. Reduction original.)

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
°	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
— 40	.0054	.0054	.0054	.0053	.0053	.0053	.0052	.0052	.0052	.0052
— 39	.0058	.0057	.0057	.0057	.0056	.0056	.0056	.0055	.0055	.0055
— 38	.0061	.0061	.0061	.0060	.0060	.0060	.0059	.0059	.0059	.0058
— 37	.0065	.0065	.0064	.0064	.0064	.0063	.0063	.0063	.0062	.0062
— 36	.0069	.0069	.0068	.0068	.0067	.0067	.0067	.0066	.0066	.0065
— 35	.0073	.0073	.0072	.0072	.0071	.0071	.0071	.0070	.0070	.0069
— 34	.0077	.0077	.0077	.0076	.0076	.0075	.0075	.0074	.0074	.0073
— 33	.0082	.0081	.0081	.0081	.0080	.0080	.0079	.0079	.0078	.0078
— 32	.0087	.0086	.0086	.0085	.0085	.0084	.0084	.0083	.0083	.0082
— 31	.0092	.0091	.0091	.0090	.0090	.0089	.0089	.0088	.0088	.0087
— 30	.0097	.0097	.0096	.0095	.0095	.0094	.0094	.0093	.0093	.0092
— 29	.0103	.0102	.0102	.0101	.0100	.0100	.0099	.0099	.0098	.0098
— 28	.0109	.0108	.0107	.0107	.0106	.0106	.0105	.0104	.0104	.0103
— 27	.0115	.0114	.0113	.0113	.0112	.0112	.0111	.0110	.0110	.0109
— 26	.0121	.0120	.0120	.0119	.0118	.0118	.0117	.0117	.0116	.0115
— 25	.0128	.0127	.0126	.0126	.0125	.0124	.0124	.0123	.0122	.0122
— 24	.0135	.0134	.0133	.0133	.0132	.0131	.0131	.0130	.0129	.0128
— 23	.0142	.0141	.0141	.0140	.0139	.0138	.0138	.0137	.0136	.0135
— 22	.0150	.0149	.0148	.0147	.0147	.0146	.0145	.0144	.0144	.0143
— 21	.0158	.0157	.0156	.0156	.0155	.0154	.0153	.0152	.0151	.0150
— 20	.0167	.0166	.0165	.0164	.0163	.0162	.0161	.0161	.0160	.0159
— 19	.0175	.0174	.0174	.0173	.0172	.0171	.0170	.0169	.0168	.0167
— 18	.0185	.0184	.0183	.0182	.0181	.0180	.0179	.0178	.0177	.0176
— 17	.0195	.0194	.0193	.0192	.0191	.0190	.0189	.0188	.0187	.0186
— 16	.0205	.0204	.0203	.0202	.0201	.0200	.0199	.0198	.0197	.0196
— 15	.0216	.0215	.0213	.0212	.0211	.0210	.0209	.0208	.0207	.0206
— 14	.0227	.0226	.0225	.0224	.0222	.0221	.0220	.0219	.0218	.0217
— 13	.0239	.0237	.0236	.0235	.0234	.0233	.0231	.0230	.0229	.0228
— 12	.0251	.0250	.0248	.0247	.0246	.0245	.0244	.0243	.0241	.0240
— 11	.0264	.0263	.0261	.0260	.0259	.0257	.0256	.0255	.0254	.0252
— 10	.0277	.0276	.0275	.0273	.0272	.0270	.0269	.0268	.0267	.0265
— 9	.0291	.0290	.0289	.0287	.0286	.0284	.0283	.0281	.0280	.0279
— 8	.0306	.0305	.0303	.0302	.0300	.0299	.0297	.0296	.0295	.0293
— 7	.0322	.0320	.0318	.0317	.0315	.0314	.0312	.0311	.0309	.0308
— 6	.0337	.0336	.0334	.0333	.0331	.0330	.0328	.0326	.0325	.0323
— 5	.0354	.0352	.0351	.0349	.0348	.0346	.0344	.0343	.0341	.0339
— 4	.0372	.0370	.0368	.0367	.0365	.0363	.0361	.0359	.0357	.0356
— 3	.0390	.0388	.0386	.0384	.0383	.0381	.0379	.0377	.0375	.0374
— 2	.0409	.0407	.0405	.0403	.0401	.0399	.0397	.0395	.0394	.0392
— 1	.0429	.0427	.0425	.0423	.0421	.0419	.0417	.0415	.0413	.0411
— 0	.0450	.0448	.0446	.0444	.0442	.0440	.0438	.0436	.0433	.0431
+ 0	.0450	.0452	.0454	.0456	.0458	.0460	.0462	.0465	.0467	.0469
1	.0471	.0473	.0475	.0478	.0480	.0482	.0484	.0487	.0489	.0491
2	.0493	.0496	.0498	.0500	.0503	.0505	.0507	.0510	.0512	.0515
3	.0517	.0519	.0522	.0524	.0526	.0529	.0532	.0534	.0536	.0539
4	.0541	.0544	.0546	.0549	.0551	.0554	.0556	.0559	.0561	.0564
5	.0567	.0569	.0572	.0574	.0577	.0580	.0582	.0585	.0587	.0590
6	.0593	.0596	.0598	.0601	.0604	.0607	.0609	.0612	.0615	.0618
7	.0620	.0623	.0626	.0629	.0632	.0635	.0638	.0641	.0643	.0646
8	.0649	.0652	.0655	.0658	.0661	.0664	.0667	.0670	.0673	.0676
9	.0679	.0682	.0685	.0688	.0691	.0694	.0697	.0700	.0704	.0707
10	.0710	.0713	.0716	.0719	.0723	.0726	.0729	.0732	.0736	.0739

XVII.—VAPOR PRESSURE. ENGLISH.

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
°	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
+ 10	.0710	.0713	.0716	.0719	.0723	.0726	.0729	.0732	.0736	.0739
11	.0742	.0746	.0749	.0752	.0756	.0759	.0762	.0766	.0769	.0772
12	.0776	.0779	.0783	.0786	.0789	.0793	.0796	.0800	.0804	.0807
13	.0811	.0814	.0818	.0822	.0825	.0829	.0832	.0836	.0839	.0843
14	.0847	.0851	.0854	.0858	.0862	.0866	.0869	.0873	.0877	.0881
15	.0885	.0889	.0893	.0896	.0900	.0904	.0908	.0912	.0916	.0920
16	.0924	.0928	.0932	.0936	.0940	.0944	.0948	.0952	.0956	.0961
17	.0965	.0969	.0973	.0977	.0982	.0986	.0990	.0994	.0998	.1003
18	.1007	.1011	.1016	.1020	.1024	.1029	.1033	.1037	.1042	.1046
19	.1051	.1055	.1060	.1064	.1069	.1074	.1078	.1083	.1087	.1092
20	.1096	.1101	.1106	.1111	.1115	.1120	.1125	.1130	.1134	.1139
21	.1144	.1149	.1154	.1159	.1164	.1169	.1173	.1178	.1183	.1188
22	.1193	.1198	.1203	.1208	.1213	.1219	.1224	.1229	.1234	.1239
23	.1244	.1250	.1255	.1260	.1265	.1271	.1276	.1281	.1287	.1292
24	.1297	.1303	.1308	.1314	.1319	.1324	.1330	.1335	.1341	.1347
25	.1352	.1358	.1363	.1369	.1375	.1381	.1386	.1392	.1398	.1404
26	.1409	.1415	.1421	.1427	.1433	.1439	.1445	.1451	.1457	.1463
27	.1469	.1475	.1481	.1487	.1493	.1499	.1505	.1511	.1517	.1524
28	.1530	.1536	.1543	.1549	.1555	.1561	.1568	.1574	.1581	.1587
29	.1593	.1600	.1606	.1613	.1619	.1626	.1633	.1639	.1646	.1652
30	.1659	.1666	.1673	.1680	.1687	.1693	.1700	.1707	.1714	.1721
31	.1728	.1735	.1742	.1749	.1756	.1763	.1770	.1777	.1784	.1791
32	.1799	.1806	.1813	.1820	.1828	.1835	.1843	.1850	.1857	.1865
33	.1872	.1880	.1887	.1895	.1902	.1910	.1917	.1925	.1933	.1940
34	.1948	.1956	.1964	.1972	.1980	.1987	.1995	.2003	.2011	.2019
35	.2027	.2035	.2043	.2051	.2059	.2067	.2076	.2084	.2092	.2100
36	.2109	.2117	.2125	.2134	.2142	.2150	.2159	.2167	.2176	.2185
37	.2193	.2202	.2210	.2219	.2228	.2236	.2245	.2254	.2263	.2272
38	.2280	.2289	.2298	.2307	.2316	.2325	.2334	.2343	.2353	.2362
39	.2371	.2380	.2389	.2399	.2408	.2417	.2427	.2436	.2446	.2455
40	.2465	.2474	.2484	.2493	.2503	.2513	.2522	.2532	.2542	.2552
41	.2562	.2572	.2582	.2591	.2601	.2611	.2622	.2632	.2642	.2652
42	.2662	.2672	.2683	.2693	.2703	.2713	.2724	.2734	.2745	.2755
43	.2766	.2776	.2787	.2798	.2808	.2819	.2830	.2841	.2852	.2862
44	.2873	.2884	.2895	.2906	.2917	.2928	.2939	.2950	.2962	.2973
45	.2984	.2996	.3007	.3018	.3030	.3041	.3053	.3064	.3076	.3087
46	.3099	.3111	.3122	.3134	.3146	.3158	.3170	.3182	.3194	.3206
47	.3218	.3230	.3242	.3254	.3267	.3279	.3291	.3303	.3316	.3328
48	.3341	.3353	.3365	.3378	.3391	.3404	.3416	.3429	.3442	.3455
49	.3467	.3480	.3493	.3506	.3519	.3532	.3545	.3559	.3572	.3585
50	.3598	.3612	.3625	.3639	.3652	.3665	.3679	.3693	.3706	.3720
51	.3734	.3748	.3762	.3775	.3789	.3803	.3817	.3831	.3845	.3860
52	.3874	.3888	.3902	.3917	.3931	.3945	.3960	.3974	.3989	.4004
53	.4018	.4033	.4048	.4063	.4077	.4092	.4107	.4122	.4137	.4152
54	.4167	.4183	.4198	.4213	.4228	.4244	.4260	.4275	.4290	.4306
55	.4322	.4337	.4353	.4369	.4385	.4401	.4417	.4433	.4449	.4465
56	.4481	.4497	.4513	.4530	.4546	.4562	.4579	.4595	.4612	.4628
57	.4645	.4662	.4678	.4695	.4712	.4729	.4746	.4763	.4780	.4798
58	.4815	.4832	.4849	.4867	.4884	.4902	.4919	.4937	.4954	.4972
59	.4990	.5008	.5026	.5044	.5061	.5079	.5097	.5115	.5134	.5152
60	.5170	.5189	.5207	.5226	.5244	.5263	.5282	.5300	.5319	.5338

XVII. VAPOR PRESSURE. ENGLISH.

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
°	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
+ 60	.5170	.5189	.5207	.5226	.5244	.5263	.5282	.5300	.5319	.5338
61	.5357	.5376	.5395	.5414	.5433	.5452	.5471	.5491	.5510	.5530
62	.5549	.5568	.5588	.5608	.5627	.5647	.5667	.5687	.5707	.5727
63	.5747	.5768	.5788	.5808	.5828	.5849	.5869	.5890	.5911	.5931
64	.5952	.5973	.5994	.6015	.6036	.6057	.6078	.6099	.6120	.6141
65	.6163	.6184	.6206	.6227	.6249	.6271	.6293	.6315	.6337	.6358
66	.6380	.6403	.6425	.6447	.6469	.6492	.6514	.6536	.6559	.6582
67	.6605	.6628	.6651	.6674	.6697	.6720	.6743	.6766	.6789	.6813
68	.6836	.6860	.6883	.6907	.6930	.6954	.6978	.7002	.7026	.7050
69	.7074	.7098	.7123	.7147	.7172	.7196	.7221	.7245	.7270	.7295
70	.7320	.7345	.7370	.7395	.7420	.7445	.7471	.7496	.7522	.7547
71	.7573	.7599	.7625	.7650	.7676	.7702	.7728	.7754	.7781	.7807
72	.7834	.7860	.7887	.7913	.7940	.7967	.7994	.8021	.8048	.8075
73	.8102	.8130	.8157	.8184	.8212	.8240	.8267	.8295	.8323	.8351
74	.8379	.8407	.8435	.8463	.8492	.8520	.8548	.8577	.8606	.8635
75	.8664	.8693	.8722	.8751	.8780	.8809	.8839	.8868	.8897	.8927
76	.8957	.8987	.9017	.9047	.9077	.9107	.9137	.9167	.9198	.9228
77	.9259	.9290	.9321	.9351	.9382	.9414	.9445	.9476	.9507	.9538
78	.9570	.9602	.9633	.9665	.9697	.9729	.9761	.9793	.9825	.9857
79	.9890	.9923	.9955	.9988	1.0021	1.0053	1.0086	1.0119	1.0152	1.0186
80	1.0220	1.0253	1.0287	1.0320	1.0354	1.0388	1.0422	1.0456	1.0490	1.0524
81	1.0558	1.0593	1.0627	1.0662	1.0697	1.0732	1.0767	1.0802	1.0837	1.0872
82	1.0907	1.0943	1.0978	1.1014	1.1050	1.1086	1.1122	1.1158	1.1194	1.1230
83	1.1266	1.1303	1.1339	1.1376	1.1412	1.1449	1.1486	1.1523	1.1561	1.1598
84	1.1635	1.1673	1.1710	1.1748	1.1786	1.1824	1.1862	1.1900	1.1938	1.1977
85	1.2015	1.2053	1.2092	1.2131	1.2170	1.2209	1.2248	1.2288	1.2327	1.2366
86	1.2406	1.2445	1.2485	1.2525	1.2565	1.2605	1.2645	1.2686	1.2726	1.2766
87	1.2807	1.2848	1.2889	1.2930	1.2971	1.3012	1.3054	1.3095	1.3137	1.3178
88	1.3220	1.3262	1.3304	1.3346	1.3389	1.3431	1.3473	1.3516	1.3559	1.3602
89	1.3645	1.3688	1.3731	1.3775	1.3818	1.3862	1.3905	1.3949	1.3993	1.4037
90	1.4081	1.4126	1.4170	1.4214	1.4259	1.4304	1.4349	1.4394	1.4439	1.4484
91	1.4530	1.4575	1.4621	1.4667	1.4713	1.4759	1.4805	1.4851	1.4898	1.4944
92	1.4991	1.5038	1.5085	1.5131	1.5178	1.5226	1.5273	1.5321	1.5368	1.5416
93	1.5464	1.5512	1.5560	1.5609	1.5657	1.5706	1.5755	1.5803	1.5852	1.5902
94	1.5951	1.6000	1.6050	1.6100	1.6149	1.6199	1.6249	1.6300	1.6350	1.6400
95	1.6451	1.6502	1.6552	1.6603	1.6655	1.6706	1.6757	1.6809	1.6860	1.6912
96	1.6964	1.7016	1.7069	1.7121	1.7174	1.7226	1.7279	1.7332	1.7385	1.7438
97	1.7492	1.7546	1.7599	1.7653	1.7707	1.7761	1.7815	1.7870	1.7924	1.7979
98	1.8034	1.8089	1.8144	1.8199	1.8254	1.8310	1.8366	1.8421	1.8477	1.8534
99	1.8590	1.8646	1.8703	1.8760	1.8817	1.8874	1.8931	1.8988	1.9046	1.9103
100	1.9161	1.9219	1.9277	1.9335	1.9394	1.9452	1.9511	1.9570	1.9629	1.9688
101	1.9747	1.9807	1.9867	1.9926	1.9986	2.0046	2.0107	2.0167	2.0228	2.0288
102	2.0349	2.0410	2.0471	2.0533	2.0594	2.0656	2.0718	2.0780	2.0842	2.0904
103	2.0967	2.1030	2.1092	2.1155	2.1219	2.1282	2.1345	2.1409	2.1473	2.1537
104	2.1601	2.1665	2.1730	2.1794	2.1859	2.1924	2.1989	2.2054	2.2120	2.2186
105	2.2251	2.2317	2.2383	2.2450	2.2516	2.2583	2.2650	2.2717	2.2784	2.2851
106	2.2919	2.2986	2.3054	2.3122	2.3191	2.3259	2.3327	2.3396	2.3465	2.3534
107	2.3603	2.3673	2.3742	2.3812	2.3882	2.3952	2.4023	2.4093	2.4164	2.4235
108	2.4306	2.4377	2.4448	2.4520	2.4592	2.4664	2.4736	2.4808	2.4881	2.4953
109	2.5026	2.5099	2.5172	2.5246	2.5319	2.5393	2.5467	2.5541	2.5616	2.5690
110	2.5765	2.5840	2.5915	2.5990	2.6066	2.6141	2.6217	2.6293	2.6369	2.6446

XVII.—VAPOR PRESSURE. ENGLISH.

F.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
°	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
110	2.5765	2.5840	2.5915	2.5990	2.6066	2.6141	2.6217	2.6293	2.6369	2.6446
111	2.6522	2.6599	2.6676	2.6753	2.6831	2.6908	2.6986	2.7064	2.7142	2.7221
112	2.7299	2.7378	2.7457	2.7536	2.7615	2.7695	2.7775	2.7855	2.7935	2.8015
113	2.8095	2.8176	2.8257	2.8338	2.8420	2.8501	2.8583	2.8665	2.8747	2.8829
114	2.8912	2.8995	2.9078	2.9161	2.9244	2.9328	2.9412	2.9496	2.9580	2.9664
115	2.9749	2.9834	2.9919	3.0004	3.0089	3.0175	3.0261	3.0347	3.0433	3.0520
116	3.0606	3.0693	3.0780	3.0868	3.0955	3.1043	3.1131	3.1219	3.1308	3.1396
117	3.1485	3.1574	3.1663	3.1753	3.1842	3.1932	3.2023	3.2113	3.2203	3.2294
118	3.2386	3.2477	3.2568	3.2660	3.2752	3.2844	3.2936	3.3029	3.3122	3.3215
119	3.3308	3.3402	3.3495	3.3589	3.3683	3.3778	3.3872	3.3967	3.4062	3.4158
120	3.4253	3.4349	3.4445	3.4541	3.4638	3.4734	3.4831	3.4928	3.5026	3.5123
121	3.5221	3.5319	3.5418	3.5516	3.5615	3.5714	3.5813	3.5913	3.6012	3.6112
122	3.6213	3.6313	3.6414	3.6515	3.6616	3.6717	3.6819	3.6921	3.7023	3.7125
123	3.7228	3.7331	3.7434	3.7537	3.7641	3.7745	3.7849	3.7954	3.8058	3.8162
124	3.8267	3.8372	3.8478	3.8584	3.8690	3.8796	3.8903	3.9010	3.9117	3.9224
125	3.9332	3.9440	3.9548	3.9656	3.9765	3.9874	3.9983	4.0092	4.0202	4.0312
126	4.0422	4.0532	4.0643	4.0754	4.0865	4.0976	4.1088	4.1200	4.1312	4.1424
127	4.1537	4.1650	4.1763	4.1877	4.1991	4.2105	4.2219	4.2334	4.2449	4.2564
128	4.2679	4.2795	4.2911	4.3027	4.3143	4.3260	4.3377	4.3494	4.3612	4.3730
129	4.3848	4.3966	4.4085	4.4204	4.4323	4.4442	4.4561	4.4680	4.4800	4.4921
130	4.5043	4.5165	4.5286	4.5408	4.5530	4.5652	4.5774	4.5897	4.6020	4.6143
131	4.6267	4.6391	4.6515	4.6640	4.6765	4.6890	4.7015	4.7140	4.7266	4.7392
132	4.7519	4.7646	4.7773	4.7900	4.8028	4.8156	4.8284	4.8412	4.8541	4.8670
133	4.8800	4.8930	4.9060	4.9190	4.9320	4.9451	4.9582	4.9714	4.9846	4.9978
134	5.0110	5.0243	5.0376	5.0509	5.0642	5.0776	5.0910	5.1045	5.1180	5.1315
135	5.1450	5.1585	5.1721	5.1857	5.1994	5.2131	5.2268	5.2406	5.2544	5.2682
136	5.2820	5.2959	5.3098	5.3237	5.3377	5.3517	5.3657	5.3798	5.3939	5.4080
137	5.4222	5.4364	5.4506	5.4648	5.4791	5.4934	5.5078	5.5222	5.5366	5.5510
138	5.5654	5.5799	5.5945	5.6091	5.6237	5.6383	5.6530	5.6677	5.6824	5.6972
139	5.7120	5.7268	5.7417	5.7566	5.7715	5.7864	5.8014	5.8164	5.8315	5.8466
140	5.8617	5.8769	5.8921	5.9073	5.9226	5.9379	5.9532	5.9686	5.9840	5.9995

TABLE XVIII.—VAPOR PRESSURE. METRICAL.

(Regnault and Broch, Trav. bur. int. poids et mes, Paris, 1881, i. p. A. 22.)

C.	0	.1	.2	.3	.4	.5	.6	.7	.8	.9
°	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
— 30	.380	.377	.373	.370	.366	.363	.360	.356	.353	.349
— 29	.419	.415	.411	.407	.403	.399	.395+	.391	.388	.384
— 28	.460	.456	.451	.447	.443	.439	.435—	.430	.426	.422
— 27	.505—	.500	.495+	.491	.486	.482	.477	.473	.468	.464
— 26	.553	.548	.543	.538	.533	.528	.524	.519	.514	.509
— 25	.606	.601	.595+	.590	.585—	.579	.574	.569	.564	.559
— 24	.664	.658	.652	.646	.640	.634	.629	.623	.617	.612
— 23	.726	.719	.713	.707	.700	.694	.688	.682	.676	.670
— 22	.793	.786	.779	.772	.765+	.759	.752	.745+	.739	.732
— 21	.866	.858	.851	.843	.836	.829	.821	.814	.807	.800
— 20	.944	.936	.928	.920	.912	.904	.896	.888	.881	.873
— 19	1.029	1.020	1.011	1.003	.994	.986	.977	.969	.960	.952
— 18	1.120	1.111	1.101	1.092	1.083	1.074	1.065—	1.055+	1.046	1.038
— 17	1.219	1.209	1.198	1.188	1.179	1.169	1.159	1.149	1.139	1.130
— 16	1.325	1.314	1.303	1.292	1.281	1.271	1.260	1.250—	1.239	1.229
— 15	1.439	1.427	1.415	1.404	1.392	1.381	1.369	1.358	1.347	1.336
— 14	1.562	1.549	1.537	1.524	1.512	1.499	1.487	1.475+	1.463	1.451
— 13	1.694	1.680	1.667	1.653	1.640	1.627	1.613	1.600	1.587	1.574
— 12	1.836	1.821	1.806	1.792	1.778	1.763	1.749	1.735+	1.721	1.708
— 11	1.988	1.972	1.957	1.941	1.926	1.910	1.895+	1.880	1.865+	1.850
— 10	2.151	2.135—	2.118	2.101	2.085—	2.068	2.052	2.036	2.020	2.004
— 9	2.327	2.308	2.290	2.273	2.255+	2.237	2.220	2.203	2.185+	2.168
— 8	2.514	2.495+	2.476	2.457	2.438	2.419	2.400	2.382	2.363	2.345—
— 7	2.715+	2.695—	2.674	2.653	2.633	2.613	2.593	2.573	2.553	2.534
— 6	2.930	2.908	2.886	2.864	2.843	2.821	2.800	2.778	2.757	2.736
— 5	3.160	3.137	3.113	3.090	3.066	3.043	3.020	2.998	2.975+	2.953
— 4	3.407	3.381	3.356	3.331	3.306	3.282	3.257	3.233	3.208	3.184
— 3	3.669	3.642	3.615+	3.589	3.562	3.536	3.510	3.484	3.458	3.432
— 2	3.950—	3.921	3.892	3.864	3.836	3.807	3.779	3.752	3.724	3.697
— 1	4.249	4.218	4.188	4.157	4.127	4.097	4.067	4.038	4.008	3.979
— 0	4.569	4.536	4.503	4.471	4.439	4.407	4.375—	4.343	4.312	4.280
0	4.569	4.602	4.635+	4.668	4.702	4.736	4.770	4.805—	4.839	4.874
1	4.909	4.944	4.980	5.016	5.052	5.088	5.124	5.161	5.198	5.235—
2	5.272	5.309	5.347	5.385+	5.424	5.462	5.501	5.540	5.579	5.619
3	5.658	5.698	5.738	5.779	5.820	5.861	5.902	5.943	5.985+	6.027
4	6.069	6.112	6.155—	6.198	6.241	6.285—	6.329	6.373	6.417	6.462
5	6.507	6.552	6.597	6.643	6.689	6.736	6.782	6.829	6.876	6.924
6	6.972	7.020	7.068	7.117	7.166	7.215+	7.265—	7.315	7.365—	7.415+
7	7.466	7.517	7.568	7.620	7.672	7.725—	7.777	7.830	7.883	7.937
8	7.991	8.045+	8.100	8.155—	8.210	8.265	8.321	8.378	8.434	8.491
9	8.548	8.606	8.664	8.722	8.781	8.840	8.899	8.959	9.019	9.079
10	9.140	9.201	9.262	9.324	9.386	9.449	9.512	9.575+	9.639	9.703
11	9.767	9.832	9.897	9.962	10.028	10.095	10.161	10.228	10.296	10.364
12	10.432	10.501	10.570	10.639	10.709	10.780	10.850+	10.921	10.993	11.065—
13	11.137	11.210	11.283	11.356	11.430	11.505—	11.580	11.655+	11.731	11.807
14	11.883	11.960	12.038	12.116	12.194	12.273	12.352	12.432	12.512	12.593
15	12.674	12.755	12.837	12.920	13.003	13.086	13.170	13.254	13.339	13.424
16	13.510	13.596	13.683	13.770	13.858	13.946	14.035+	14.124	14.214	14.304
17	14.395+	14.486	14.578	14.670	14.763	14.856	14.950+	15.044	15.139	15.234
18	15.330	15.427	15.524	15.621	15.719	15.818	15.917	16.017	16.117	16.218
19	16.319	16.421	16.523	16.626	16.730	16.834	16.939	17.044	17.150—	17.256
20	17.363	17.471	17.579	17.688	17.797	17.907	18.018	18.129	18.241	18.353
21	18.466	18.580	18.694	18.809	18.924	19.040	19.157	19.274	19.392	19.511
22	19.630	19.750—	19.870	19.991	20.113	20.236	20.359	20.483	20.607	20.732
23	20.858	20.984	21.111	21.239	21.367	21.496	21.626	21.757	21.888	22.020
24	22.153	22.286	22.420	22.555	22.690	22.826	22.963	23.101	23.239	23.378
25	23.518	23.658	23.799	23.941	24.084	24.227	24.371	24.516	24.662	24.809
26	24.956	25.104	25.253	25.402	25.552	25.703	25.855+	26.008	26.161	26.315
27	26.470	26.626	26.783	26.941	27.099	27.258	27.418	27.579	27.740	27.902
28	28.065+	28.229	28.394	28.560	28.727	28.894	29.062	29.231	29.401	29.572
29	29.744	29.917	30.091	30.265	30.440	30.616	30.793	30.971	31.149	31.329
30	31.510	31.691	31.873	32.057	32.241	32.426	32.612	32.799	32.987	33.176
31	33.366	33.557	33.749	33.942	34.136	34.330	34.526	34.723	34.921	35.119
32	35.318	35.519	35.721	35.923	36.126	36.331	36.536	36.743	36.951	37.159
33	37.369	37.580	37.791	38.004	38.218	38.433	38.649	38.866	39.084	39.303
34	39.523	39.744	39.966	40.190	40.414	40.640	40.866	41.094	41.323	41.553
35	41.784	42.016	42.250—	42.484	42.720	42.957	43.195—	43.434	43.674	43.915+

XVIII.—VAPOR PRESSURE. METRICAL.

C.	0	.1	.2	.3	.4	.5	.6	.7	.8	.9
°	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
35	41.784	42.016	42.250—	42.484	42.720	42.957	43.195—	43.434	43.674	43.915+
36	44.158	44.401	44.646	44.892	45.139	45.388	45.637	45.888	46.140	46.393
37	46.648	46.903	47.160	47.418	47.677	47.938	48 200	48.463	48.727	48.992
38	49.259	49.527	49.796	50.067	50.339	50.612	50.886	51.162	51.439	51.717
39	51.996	52.277	52.559	52.843	53.128	53.414	53.702	53.991	54.281	54.572
40	54.865+	55.159	55.455	55.752	56.050	56.350+	56.651	56.954	57.258	57.563
41	57.870	58.178	58.488	58.799	59.111	59.425+	59.741	60.058	60.376	60.696
42	61.017	61.339	61.663	61.989	62.316	62.645	62.975+	63.307	63.640	63.974
43	64.310	64.648	64.987	65.328	65.670	66.014	66.359	66.706	67.055—	67.405
44	67.757	68.110	68.465	68.822	69.180	69.539	69.901	70.264	70.628	70.994
45	71.362	71.731	72.102	72.475+	72.850	73.226	73.603	73.983	74.364	74.747
46	75.131	75.518	75.906	76.295+	76.687	77.080	77.475—	77.871	78.270	78.670
47	79.071	79.475—	79.880	80.287	80.696	81.107	81.520	81.934	82.350+	82.768
48	83.188	83.610	84.034	84.459	84.886	85.315+	85.746	86.179	86.614	87.050—
49	87.488	87.928	88.371	88.815—	89.261	89.709	90.159	90.611	91.064	91.520
50	91.978	92.438	92.900	93.363	93.829	94.297	94.766	95.238	95.711	96.187
51	96.664	97.144	97.626	98.109	98.595+	99.083	99.573	100.065+	100.559	101.056
52	101.554	102.055—	102.557	103.062	103.569	104.078	104.589	105.102	105.618	106.135+
53	106.655	107.176	107.700	108.227	108.755+	109.286	109.819	110.354	110.892	111.431
54	111.973	112.517	113.063	113.612	114.163	114.716	115.272	115.829	116.389	116.952
55	117.516	118.083	118.652	119.224	119.798	120.375	120.953	128.535	122.118	122.704
56	123.292	123.883	124.476	125.072	125.670	126.270	126.873	127.479	128.087	128.697
57	129.309	129.925—	130.542	131.163	131.786	132.411	133.039	133.669	134.302	134.937
58	135.575	136.215+	136.859	137.504	138.153	138.803	139.457	140.113	140.772	141.433
59	142.097	142.764	143.433	144.105+	144.780	145.458	146.138	146.820	147.506	148.194
60	148.885	149.578	150.275	150.974	151.676	152.380	153.088	153.798	154.511	155.227

TABLE XIX.—DECREASE OF VAPOR PRESSURE.

With Altitude.

Hann and Hazen. See Zeitschr. met. Wien, 1874, ix; p. 195.

Quotient $\frac{p}{po}$ for each thousand feet.

Height.	Mts.	Balloons.			Height.	Mts.	Balloons.	
		Hann.	Hazen.				Hann.	Hazen.
1000	85	88	97	93	11000	35	27	47
2	81	80	86	80	12	35	23	45
3	80	66	87	73	13	30	22	30
4	66	61	84	73	14	26	21	19
5	61	60	81	53	15	22	19	15
6	58	54	79	13	16	19	17	12
7	55	41	76	12	17	18	16	...
8	47	37	65	...	18	17	16	...
9	41	34	51	...	19	16	13	...
10	36	31	49	...	20	16	11	...

In this table the column headed mts. presents the mean of a very large number of observations collated by Dr. Hann, and the same is true of the column headed balloons, Hann. These were from unventilated psychrometers.

The second and third columns under "balloons" are the results with a sling psychrometer in balloon voyages on June 17, 1887, at St. Louis, and on August 13, at Philadelphia. The results in the latter cases were very satisfactory, agreeing at the same height in the ascent and descent.

TABLES XX AND XXI.

WEIGHT OF VAPOR.

Introduction.

It is often necessary to determine the weight of vapor in air having various percentages of humidity. The simplest method is based on the principle that the quantity of vapor is constant at any given dew-point, whatever may be the relative humidity of the air. Hence, the dew-point being given, we may immediately obtain the weight of vapor by these tables. The dew-point, if not given, may be found from the wet and dry bulb temperatures by Table XXII or XXIII.

Example.

Let the air temperature be 55°, and the wet bulb temperature 44°.

From Table XXII, we find the dew-point 30°, and from Table XIX, with dew-point 30°, the weight of vapor is 1.969 gr.

TABLE XX.—WEIGHT OF VAPOR IN A CUBIC FOOT OF SATURATED AIR.

Temperature F. Grains Troy. (Guyot, p. 131.)

$$W = .622 \frac{566.5654}{1 + .002036\,(t - 32°)} \times \frac{F}{30}$$

d. p.	wt.	d. p.	wt.	d. p.	wt.	d. p.	wt.	d. p.	wt.
°		°		°		°		°	
0	.545	20	1.298	40	2.862	60	5.756	80	10.949
1	.569	21	1.355	41	2.967	61	5.952	81	11.291
2	.595	22	1.415	42	3.076	62	6.154	82	11.643
3	.621	23	1.476	43	3.189	63	6.361	83	12.005
4	.649	24	1.540	44	3.306	64	6.575	84	12.376
5	.678	25	1.606	45	3.426	65	6.795	85	12.756
6	.708	26	1.674	46	3.550	66	7.021	86	13.146
7	.739	27	1.745	47	3.679	67	7.253	87	13.546
8	.772	28	1.817	48	3.811	68	7.493	88	13.957
9	.806	29	1.892	49	3.948	69	7.739	89	14.378
10	.841	30	1.969	50	4.089	70	7.992	90	14.810
11	.878	31	2.046	51	4.234	71	8.252	91	15.254
12	.916	32	2.126	52	4.383	72	8.521	92	15.709
13	.957	33	2.208	53	4.537	73	8.797	93	16.176
14	.999	34	2.292	54	4.696	74	9.081	94	16.654
15	1.043	35	2.379	55	4.860	75	9.372	95	17.145
16	1.090	36	2.469	56	5.028	76	9.670	96	17.648
17	1.138	37	2.563	57	5.202	77	9.977	97	18.164
18	1.190	38	2.659	58	5.381	78	10.292	98	18.693
19	1.243	39	2.759	59	5.566	79	10.616	99	19.235
20	1.298	40	2.862	60	5.756	80	10.949	100	19.790

TABLE XXI.—WEIGHT OF VAPOR IN A CUBIC METRE OF SATURATED AIR.

Temperature C. Grams.

(Guyot, page 75.)

$$W = .622 \frac{1.293223}{1 + .00367t} \times \frac{F}{760}$$

d. p.	wt.	d. p.	wt.	d. p.	wt.	d. p.	wt.
°		°		°		°	
—20	1.042	— 5	3.376	10	9.357	25	22.831
—19	1.130	— 4	3.638	11	9.962	26	24.144
—18	1.224	— 3	3.919	12	10.601	27	25.524
—17	1.325	— 2	4.217	13	11.276	28	26.971
—16	1.434	— 1	4.534	14	11.988	29	28.489
—15	1.551	0	4.869	15	12.739	30	30.079
—14	1.678	1	5.209	16	13.532	31	31.744
—13	1.813	2	5.571	17	14.367	32	33.491
—12	1.957	3	5.953	18	15.247	33	35.317
—11	2.114	4	6.360	19	16.173	34	37.230
—10	2.283	5	6.791	20	17.148	35	39.231
— 9	2.475	6	7.247	21	18.174	36	41.323
— 8	2.678	7	7.731	22	19.253	37	43.510
— 7	2.896	8	8.243	23	20.387	38	45.795
— 6	3.128	9	8.785	24	22.579	39	48.182
— 5	3.376	10	9.357	25	22.831	40	50.674

TABLES XXII AND XXIII.

DEW-POINT AND RELATIVE HUMIDITY.

Introduction.

For nearly one hundred years, a convenient method of determining the moisture contents of the air from readings of the wet and dry bulb thermometers has been sought. The main difficulty in all discussions has been the lack of ventilation of the wet bulb. The simplest form of expression is that of Regnault[1] as follows:

$x = f - a\,(t - t')\,p.$, in which,

x = the vapor pressure at the dew-point;

f = the vapor pressure at the wet bulb temperature;

t = the observed (C.) temperature of the air;

t' = the observed (C.) temperature of the wet bulb;

p = the pressure of the air;

a = a constant to be determined by experiment.

The value of a, as determined by different experimenters, has ranged from .00084 to .00067. The larger value from unventilated readings, and the smaller by means of the sling psychrometer.

A long series of experiments by the author[2] has shown that the latter value is satisfactory. Assuming

$$p = 29.4 \text{ and, } a = .000673,$$

the formula becomes

$$x = f - .011\,(t - t'),$$

which is easy for computation in English measures.

The above formula has received a marked confirmation by the experiments of Dr. A. Sprung with an Assman aspiration psychrometer. The results are given in "Das Wetter," Vol. V, p. 105, and show the same value of the constant adopted here. We may feel assured that this formula is

[1] Compt. Rend., Paris, 1845, xx, 1127, 1220; 1852, xxxv, 930.

[2] Am. Met. Jour., Ann Arbor, 1885, i, 342, 396.

exact, and the table may be used for all properly ventilated psychrometers.

The following formula has been deduced by Professor Ferrel from a long series of observations with the sling psychrometer at Colorado Springs and Pike's Peak by Professor Marvin:

$$x = f - .000367\ (t - t'),\ p\ \left(1 + \frac{t - t'}{1571}\right)$$

The temperature is in (F.) degrees. Substituting,

$$p = 29.4, \text{ we have, for } t - t' = 10°, x = f - .011\ (t - t'),$$

which agrees with the above formula in all cases except when the air is very dry, and even then the difference seldom amounts to 1° in the computed dew-point, which is far within the accuracy of vapor pressures used.

While these tables apply strictly only to sling or ventilated psychrometers, yet they will be but slightly in error for all shelters of fair exposure.

Regnault's original formula contained a slight modification for readings of the wet bulb when covered with ice, based on a theoretical difference in evaporation. Experiment, however, has shown that there is no difference in the results, whether the bulb be covered with ice or water, and no change has been introduced in these tables.

The tables have been computed for a constant barometer reading of 29.4 in., as the average air-pressure at the majority of stations in this country. It will be found that, up to 3000 feet the errors incident to the use of the psychrometer are much greater than will justify a correction for pressures differing from 29.4 in., but either Part II or III of the table will enable one to apply this refinement, if desired.

It will readily be seen, from the construction of the table, that, if there be given the dew-point from Regnault's condensing hygrometer, and the air-temperature, the relative humidity may be deduced without difficulty.

EXAMPLES.

Given, $t = 65°$; $t' = 50°$; then $t - t' = 15$.

From Table XXII, with the above values, we find; dew-point = 34°, and relative humidity = 31 per cent.

Given, $t = 65°$, $t' = 55°$, $p = 26''$.

Table XXII gives dew-point 47°.

From Table XVII, the vapor pressure for dew-point 47° = .322; the correction of this from Table XXII, Part II, for $t - t' = 10°$ and $p = 26''$ is + .013. Table XVII, with vapor pressure = .335 gives dew-point = 48°. Table XXII, with air-temperature = 65° and dew-point = 48°, gives relative humidity = 54 per cent. This correction to the dew-point for pressure, may be found much more readily from Table XXII, Part III, as follows:

Given, $t = 65°$, $t' = 55°$, $p = 26''$.

The dew-point = 47°, as before; Part III, with air-temperature = 65°, pressure = 26″, and $t - t' = 10°$, gives correction = 1°; hence, dew-point corrected for pressure = 48°, as before.

RELATIVE HUMIDITY FROM CONDENSING HYGROMETER.

Given, $t = 65°$; dew-point = 40°; we have at once, relative humidity = 39 per cent.

While these tables are extended to —40° F. and below for the dew-point, yet it should be borne in mind that we have no experimental vapor tensions below —22° F., but the tables are computed on extrapolated values from the formulæ. A series of experiments in the Northwest in winter extending Regnault's work 20 or 30 degrees lower would be of great value.

TABLE XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

PART I.

(Original.)

Depression of the wet-bulb thermometer ($t - t'$).

t F.	.02 d.p.	.02 r.h.	.04 d.p.	.04 r.h.	.06 d.p.	.06 r.h.	.08 d.p.	.08 r.h.	1.0 d.p.	1.0 r.h.	1.2 d.p.	1.2 r.h.	1.4 d.p.	1.4 r.h.	1.6 d.p.	1.6 r.h.	1.8 d.p.	1.8 r.h.	2.0 d.p.	2.0 r.h.	2.2 d.p.	2.2 r.h.	2.4 d.p.	2.4 r.h.	2.6 d.p.	2.6 r.h.	t F.
°																											°
—40	—60	66																									—40
—39	—58	67																									—39
—38	—56	68	—80	36																							—38
—37	—53	69	—76	38																							—37
—36	—51	70	—73	40																							—36
—35	—49	71	—69	42																							—35
—34	—47	72	—65	44																							—34
—33	—44	73	—62	46																							—33
—32	—41	74	—59	48																							—32
—31	—39	76	—56	51																							—31
—30	—36	77	—52	53	—75	29																					—30
—29	—34	78	—48	56	—69	33																					—29
—28	—33	79	—44	58	—64	36																					—28
—27	—31	80	—41	60	—59	39																					—27
—26	—30	81	—37	62	—54	42																					—26
—25	—29	82	—34	64	—49	45	—69	26																			—25
—24	—27	83	—32	66	—44	48	—62	30																			—24
—23	—26	84	—30	67	—40	51	—56	34																			—23
—22	—25	84	—29	68	—36	53	—51	37	—73	20																	—22
—21	—24	85	—27	70	—33	55	—45	39	—64	24																	—21
—20	—23	86	—26	71	—31	57	—40	42	—57	28																	—20
—19	—22	86	—25	73	—29	59	—35	45	—50	32	—71	18															—19
—18	—21	87	—24	74	—27	61	—32	48	—43	35	—62	22															—18
—17	—20	88	—22	75	—26	63	—30	50	—37	38	—54	26															—17
—16	—18	88	—21	77	—24	65	—28	53	—33	41	—46	29	—67	18													—16
—15	—17	89	—20	78	—23	66	—26	55	—31	44	—40	32	—58	21													—15
—14	—16	89	—19	79	—22	68	—25	57	—29	46	—35	35	—49	25	—71	14											—14
—13	—15	90	—17	80	—20	69	—23	59	—27	49	—32	38	—42	28	—60	18											—13
—12	—14	90	—16	80	—19	71	—22	61	—25	51	—29	41	—36	31	—51	22	—74	12									—12
—11	—13	91	—15	81	—18	72	—20	62	—23	53	—27	44	—32	34	—43	25	—61	16									—11
—10	—12	91	—14	82	—16	73	—19	64	—22	55	—25	47	—29	37	—37	28	—51	19	—76	10							—10
— 9	—11	91	—13	83	—15	74	—17	65	—20	57	—23	49	—27	40	—32	31	—42	23	—61	14							— 9
— 8	—10	92	—12	84	—14	75	—16	67	—19	59	—21	51	—25	42	—29	34	—35	26	—50	18							— 8
— 7	— 9	92	—10	84	—12	76	—15	68	—17	61	—20	53	—23	45	—26	37	—31	29	—40	21	—59	14					— 7
— 6	— 8	93	— 9	85	—11	77	—13	70	—15	63	—18	55	—21	48	—24	40	—28	32	—34	25	—46	18	—69	10			— 6
— 5	— 7	93	— 8	86	—10	78	—12	71	—14	64	—16	57	—19	50	—22	42	—25	35	—30	28	—37	21	—55	14			— 5
— 4	— 5	93	— 7	86	— 9	79	—11	72	—13	65	—15	59	—17	52	—20	45	—23	38	—27	31	—32	24	—43	17	—64	11	— 4
— 3	— 4	93	— 6	87	— 8	80	— 9	73	—11	67	—13	60	—16	54	—18	47	—21	41	—24	34	—29	27	—35	21	—51	14	— 3
— 2	— 3	94	— 5	87	— 6	81	— 8	74	—10	68	—12	62	—14	56	—16	49	—19	43	—22	37	—26	30	—30	24	—40	18	— 2
— 1	— 2	94	— 4	88	— 5	82	— 7	75	— 9	69	—10	63	—12	57	—15	51	—17	45	—20	39	—23	33	—27	27	—33	21	— 1
0	— 1	94	— 3	88	— 4	82	— 6	76	— 7	71	— 9	65	—11	59	—13	53	—15	47	—18	42	—21	36	—24	30	—28	24	0
1	0	94	— 2	89	— 3	83	— 4	77	— 6	72	— 8	66	— 9	61	—11	55	—13	49	—16	44	—18	38	—21	33	—25	28	1
2	1	95	0	89	— 2	84	— 3	78	— 5	73	— 6	68	— 8	62	—10	57	—12	51	—14	46	—16	41	—19	36	—22	31	2
3	2	95	1	90	—1	84	— 2	79	— 3	74	— 5	69	— 6	64	— 8	59	—10	53	—12	48	—14	43	—17	38	—20	33	3
4	3	95	2	90	0	85	— 1	80	— 2	75	— 4	70	— 5	65	— 7	60	— 8	55	—10	50	—13	45	—15	40	—17	35	4
5	4	95	3	90	2	86	0	81	— 1	76	— 2	71	— 4	66	— 5	62	— 7	57	— 9	52	—11	47	—13	43	—15	38	5
6	5	95	4	91	3	86	2	81	0	77	— 1	72	— 2	68	— 4	63	— 5	59	— 7	54	— 9	49	—11	45	—13	41	6
7	6	95	5	91	4	86	3	82	1	78	0	73	— 1	69	— 2	64	— 4	60	— 6	56	— 7	51	— 9	47	—11	43	7
8	7	96	6	92	5	87	4	83	3	79	2	74	0	70	— 1	66	— 3	61	— 4	57	— 6	53	— 7	49	— 9	45	8
9	8	96	7	92	6	87	5	83	4	79	3	75	2	71	0	67	— 1	63	— 3	59	— 4	55	— 6	51	— 8	47	9
10	9	96	8	92	7	88	6	84	5	80	4	76	3	72	2	68	0	64	— 1	60	— 3	56	— 4	52	— 6	48	10
11	10	96	9	92	8	88	7	85	6	81	5	77	4	73	3	69	2	65	0	62	— 1	58	— 2	54	— 4	50	11
12	11	96	10	93	9	89	8	85	7	81	6	78	5	74	4	70	3	66	2	63	0	59	— 1	56	— 3	52	12
13	12	96	11	93	10	89	9	86	9	82	8	78	7	75	5	71	4	68	3	64	2	61	1	57	— 1	53	13
14	13	96	12	93	12	90	11	86	10	83	9	79	8	76	7	72	6	69	5	65	3	62	2	59	0	55	14
15	14	97	13	93	13	90	12	87	11	83	10	80	9	77	8	73	7	70	6	67	5	63	4	60	2	57	15
16	15	97	14	94	14	90	13	87	12	84	11	81	10	77	9	74	8	71	7	68	6	65	5	61	3	58	16
17	16	97	16	94	15	91	14	87	13	84	12	81	11	78	10	75	9	72	8	69	7	66	6	63	5	60	17
18	17	97	17	94	16	91	15	88	14	85	14	82	13	79	12	76	11	73	10	70	9	67	8	64	6	61	18
19	18	97	18	94	17	91	16	88	15	85	15	82	14	79	13	76	12	74	11	71	10	68	9	65	8	62	19
20	19	97	19	94	18	91	17	89	16	86	16	83	15	80	14	77	13	74	12	72	12	69	10	66	9	63	20
	.02		.04		.06		.08		1.0		1.2		1.4		1.6		1.8		2.0		2.2		2.4		2.6		

XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

Depression of the wet-bulb thermometer ($t - t'$).

t F.	2.6		2.8		3.0		3.2		3.4		3.6		3.8		4.0		4.2		4.4		t F.
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	
°																					°
0	—28	24	—34	18	—39	13															0
1	—25	28	—30	21	—34	16															1
2	—22	30	—26	25	—30	20	—37	13													2
3	—20	33	—23	28	—27	23	—33	16	—39	11											3
4	—17	35	—20	31	—24	26	—29	19	—34	14	—39	11									4
5	—15	38	—18	33	—21	28	—25	22	—29	18	—33	14									5
6	—13	41	—16	35	—18	31	—22	25	—25	21	—29	17	—35	12							6
7	—11	43	—13	38	—16	34	—19	28	—22	24	—25	20	—30	16	—35	12					7
8	— 9	45	—11	41	—13	36	—16	31	—19	27	—22	23	—26	19	—30	15	—38	9			8
9	— 8	47	— 9	43	—11	38	—14	33	—16	30	—19	26	—22	22	—26	18	—32	13	—39	9	9
10	— 6	48	— 7	45	— 9	41	—12	35	—14	32	—16	29	—19	25	—22	21	—27	16	—32	12	10
11	— 4	50	— 6	46	— 7	43	—10	38	—12	34	—14	31	—16	28	—19	24	—23	19	—27	16	11
12	— 3	52	— 4	48	— 6	45	— 8	41	— 9	37	—11	34	—14	30	—16	26	—19	22	—23	19	12
13	— 1	53	— 2	50	— 4	46	— 6	43	— 7	39	— 9	36	—11	32	—13	29	—16	25	—19	22	13
14	0	55	— 1	51	— 2	48	— 4	44	— 5	41	— 7	38	— 9	34	—11	31	—13	28	—16	24	14
15	2	57	1	53	0	50	— 2	46	— 3	43	— 5	40	— 7	36	— 9	34	—11	30	—13	27	15
16	3	58	2	54	1	52	0	48	— 2	45	— 3	42	— 5	38	— 6	36	— 8	33	—10	30	16
17	5	60	4	56	3	53	2	50	0	47	— 1	44	— 3	40	— 4	38	— 6	35	— 8	32	17
18	6	61	5	57	4	55	3	52	2	49	1	46	— 1	42	— 2	40	— 4	37	— 6	34	18
19	8	62	7	59	6	56	5	54	4	51	2	48	1	45	0	42	— 2	39	— 4	36	19
20	9	63	8	60	7	58	6	55	5	53	4	50	3	47	1	44	0	41	— 1	38	20

	4.6		4.8		5.0		5.2		5.4		5.6		5.8		6.0		6.2		6.4		
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.r.	r.h.	
10	—37	9																			10
11	—31	13	—38	8																	11
12	—26	16	—31	12	—37	8															12
13	—22	18	—26	15	—31	12	—39	7													13
14	—18	21	—22	18	—26	15	—32	10	—39	7											14
15	—15	24	—18	21	—22	18	—26	14	—31	10	—36	8									15
16	—12	27	—15	23	—18	20	—22	16	—25	13	—29	11	—37	7							16
17	—10	29	—12	26	—15	23	—18	19	—21	16	—24	14	—30	10	—35	8					17
18	— 8	31	—10	28	—12	25	—14	22	—17	19	—20	17	—24	13	—28	11	—36	7			18
19	— 5	34	— 7	31	— 9	28	—11	25	—14	22	—16	19	—20	16	—23	14	—28	10	—34	7	19
20	— 3	36	— 5	33	— 6	30	— 9	27	—11	24	—13	22	—16	19	—18	16	—23	13	—27	11	20

XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

Depression of the wet-bulb thermometer ($t - t'$).

t F.	0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		t F.
	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	
20	18	93	16	86	14	79	12	72	9	65	7	58	4	51	1	44	—3	37	—6	30	—12	23	—18	16	20
21	19	93	18	86	16	79	14	73	11	66	9	59	6	52	3	45	—1	39	—4	32	—10	25	—15	19	21
22	20	93	19	86	17	80	15	73	12	67	10	60	7	54	5	47	1	41	—2	34	— 7	28	—12	21	22
23	21	93	20	87	18	80	16	74	14	68	12	61	9	55	6	49	3	43	0	36	— 5	30	— 9	24	23
24	22	94	21	87	19	81	17	75	15	69	13	62	10	56	8	50	5	44	2	38	— 2	32	— 6	26	24
25	23	94	22	88	20	82	18	76	16	70	14	63	12	57	10	52	7	46	4	40	0	34	— 3	28	25
26	24	94	23	88	21	82	20	76	18	71	16	65	13	59	11	53	8	47	6	42	2	36	— 1	30	26
27	25	94	24	89	22	83	21	77	19	72	17	66	15	60	13	54	10	49	8	43	4	38	1	32	27
28	26	95	25	89	23	83	22	78	20	72	18	67	16	61	14	56	11	50	9	45	6	39	3	34	28
29	27	95	26	89	24	84	23	78	21	73	20	67	18	62	16	57	13	52	11	47	8	41	5	36	29
30	28	95	27	90	25	84	24	79	22	73	21	68	19	63	17	58	15	53	13	48	10	43	7	38	30
31	29	95	28	90	26	84	25	79	23	74	22	69	20	64	19	59	16	54	14	49	11	45	9	40	31
32	30	95	29	90	28	85	27	80	25	75	23	70	21	65	20	61	18	56	16	51	13	46	11	41	32
33	31	95	30	90	29	85	28	80	26	76	25	71	23	66	21	62	19	57	17	52	15	47	13	43	33
34	32	95	31	90	30	85	29	81	27	76	26	72	24	67	23	63	21	58	19	53	16	49	14	44	34
35	33	95	32	91	31	86	30	81	28	77	27	72	25	68	24	64	22	59	20	54	18	50	16	45	35
36	35	96	34	91	32	86	31	82	29	77	28	73	26	69	25	64	23	60	22	55	20	51	18	47	36
37	36	96	35	91	33	87	32	82	30	78	29	74	27	69	26	65	24	61	23	56	21	52	19	48	37
38	37	96	36	92	34	87	33	83	32	79	31	75	29	70	28	66	26	62	24	57	22	53	21	50	38
39	38	96	37	92	35	88	34	83	33	79	32	75	30	71	29	67	27	63	26	58	24	54	22	51	39
40	39	96	38	92	36	88	35	84	34	80	33	76	31	72	30	68	28	63	27	59	25	55	24	52	40
41	40	96	39	92	37	88	36	84	35	80	34	76	32	72	31	68	29	64	28	60	26	57	25	53	41
42	41	96	40	92	39	88	38	84	36	81	35	77	34	73	33	69	31	65	29	61	27	58	26	54	42
43	42	96	41	92	40	88	39	85	37	81	36	77	35	74	34	70	32	66	31	62	28	58	28	55	43
44	43	96	42	92	41	88	40	85	38	81	37	78	36	74	35	70	33	67	32	63	30	59	29	56	44
45	44	96	43	92	42	89	41	85	40	82	39	78	37	75	36	71	34	67	33	64	31	60	30	57	45
46	45	96	44	93	43	89	42	85	41	82	40	79	38	75	37	72	36	68	35	65	33	61	32	58	46
47	46	96	45	93	44	89	43	86	42	83	41	79	40	76	39	72	37	69	36	66	34	62	33	59	47
48	47	96	46	93	45	89	44	86	43	83	42	79	41	76	40	73	38	69	37	66	36	63	35	60	48
49	48	97	47	93	46	90	45	86	44	83	43	80	42	76	41	73	39	70	38	67	37	63	36	60	49
50	49	97	48	93	47	90	46	87	45	83	44	80	43	77	42	74	41	70	40	67	38	64	37	61	50
51	50	97	49	93	48	90	47	87	46	84	45	81	44	77	43	74	42	71	41	68	39	65	38	62	51
52	51	97	50	94	49	90	48	87	47	84	46	81	45	78	44	75	43	72	42	69	41	66	40	63	52
53	52	97	51	94	50	91	49	87	48	84	47	81	46	78	45	75	44	72	43	69	42	66	41	63	53
54	53	97	52	94	51	91	50	88	50	85	49	82	47	79	46	76	45	73	44	70	43	67	42	64	54
55	54	97	53	94	53	91	52	88	51	85	50	82	49	79	48	76	47	73	46	70	44	68	43	65	55
56	55	97	54	94	54	91	53	88	52	85	51	82	50	80	49	77	48	74	47	71	45	68	44	65	56
57	56	97	55	94	55	91	54	88	53	86	52	83	51	80	50	77	49	74	48	71	47	69	46	66	57
58	57	97	56	94	56	91	55	89	54	86	53	83	52	80	51	78	50	75	49	72	48	69	47	67	58
59	58	97	57	94	57	92	56	89	55	86	54	83	53	81	52	78	51	75	50	72	49	70	48	67	59
60	59	97	58	94	58	92	57	89	56	86	55	84	54	81	53	78	52	75	51	73	50	70	49	68	60
61	60	97	59	94	59	92	58	89	57	87	56	84	55	81	54	78	53	76	52	73	51	71	50	68	61
62	61	97	60	95	60	92	59	89	58	87	57	84	56	81	55	79	54	76	53	74	52	71	52	69	62
63	62	97	61	95	61	92	60	89	59	87	58	84	57	82	56	79	55	77	55	74	54	72	53	69	63
64	63	97	62	95	62	92	61	90	60	87	59	85	58	82	57	79	56	77	56	74	55	72	54	70	64
65	64	97	63	95	63	92	62	90	61	87	60	85	59	82	59	80	58	77	57	75	56	72	55	70	65
66	65	97	64	95	64	92	63	90	62	87	61	85	60	82	60	80	59	78	58	75	57	73	56	71	66
67	67	98	66	95	65	93	64	90	63	88	62	85	61	83	61	80	60	78	59	76	58	73	57	71	67
68	68	98	67	95	66	93	65	90	64	88	63	85	62	83	62	81	61	78	60	76	59	74	58	71	68
69	69	98	68	95	67	93	66	90	65	88	64	86	63	83	63	81	62	78	61	76	60	74	59	72	69
70	70	98	69	95	68	93	67	90	67	88	66	86	65	83	64	81	63	79	62	77	61	74	61	72	70
71	71	98	70	95	69	93	68	91	68	88	67	86	66	84	65	81	64	79	63	77	62	75	62	72	71
72	72	98	71	95	70	93	69	91	69	88	68	86	67	84	66	82	65	79	64	77	63	75	63	73	72
73	73	98	72	95	71	93	70	91	70	88	69	86	68	84	67	82	66	80	66	78	65	75	64	73	73
74	74	98	73	95	72	93	71	91	71	88	70	86	69	84	68	82	67	80	67	78	66	76	65	74	74
75	75	98	74	95	73	93	72	91	72	89	71	87	70	84	69	82	68	80	68	78	67	76	66	74	75
76	76	98	75	95	74	93	73	91	73	89	72	87	71	85	70	82	69	80	69	78	68	76	67	74	76
77	77	98	76	95	75	93	74	91	74	89	73	87	72	85	71	83	70	80	70	78	69	76	68	74	77
78	78	98	77	96	76	93	75	91	75	89	74	87	73	85	72	83	71	81	71	79	70	77	69	75	78
79	79	98	78	96	77	94	76	91	76	89	75	87	74	85	73	83	72	81	72	79	71	77	70	75	79
80	80	98	79	96	78	94	77	92	77	89	76	87	75	85	74	83	73	81	73	79	72	77	72	75	80
	0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		

XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

Depression of the wet-bulb thermometer ($t - t'$).

t F.	6.0		6.5		7.0		7.5		8.0		8.5		9.0		9.5		10.0		10.5		11.0		11.5		12.0		t F.
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d p.	r.h.	
°																											°
20	—18	16	—39	9	—70	3																					20
21	—15	19	—24	12	—40	6																					21
22	—12	21	—18	15	—28	9																					22
23	— 9	24	—15	17	—23	11	—62	5																			23
24	— 6	26	—12	20	—18	14	—30	9	—67	1																	24
25	— 3	28	— 8	22	—14	17	—22	12	—36	4																	25
26	— 1	30	— 5	24	—10	19	—17	14	—26	8	—60	2															26
27	1	32	— 3	27	— 7	22	—13	16	—21	11	—30	5															27
28	3	34	0	29	— 4	24	—10	19	—16	14	—24	8	—54	3													28
29	5	36	2	31	— 2	26	— 7	21	—12	16	—18	11	—30	6	—70	1											29
30	7	38	4	33	1	28	— 3	23	— 8	18	—14	13	—23	9	—40	4											30
31	9	40	6	35	3	30	— 1	25	— 5	21	—10	16	—16	11	—25	7	—63	2									31
32	11	41	8	37	5	32	2	27	— 2	23	— 7	18	—12	14	—19	9	—32	5									32
33	13	43	10	38	7	34	4	29	0	25	— 4	20	— 8	16	—14	12	—23	7	—50	5							33
34	14	44	11	40	9	35	6	31	3	27	— 1	22	— 5	18	—10	14	—18	10	—28	7	—74	2					34
35	16	45	13	41	11	37	8	33	5	29	2	24	— 2	20	— 7	16	—13	12	—20	8	— 35	4					35
36	18	47	15	43	13	38	10	34	8	30	4	26	1	22	— 3	18	— 8	14	—15	10	—25	6					36
37	19	48	17	44	15	40	12	36	10	32	7	28	4	24	0	20	— 5	16	—10	12	—17	9	—30	4			37
38	21	50	19	46	17	42	14	38	12	34	9	30	6	26	3	22	— 1	18	— 6	15	—12	11	—20	7	—35	3	38
39	22	51	20	47	18	43	16	39	14	35	11	32	8	28	5	24	2	20	— 3	17	— 8	13	—14	9	—23	6	39
40	24	52	22	48	20	44	18	41	16	37	13	33	11	30	7	26	4	22	0	19	— 4	15	—10	11	—16	8	40
41	25	53	23	49	22	46	19	42	17	38	15	35	13	31	10	28	7	24	3	21	0	17	— 5	13	—11	10	41
42	26	54	24	50	23	47	21	43	19	40	17	36	15	33	12	29	9	26	6	22	3	19	— 1	15	— 6	12	42
43	28	55	26	51	25	48	23	45	21	41	19	38	17	34	14	31	12	28	9	24	6	21	2	17	— 2	14	43
44	29	56	27	52	26	49	24	46	23	43	21	39	19	36	16	32	14	29	11	26	8	23	5	19	1	16	44
45	30	57	28	53	27	50	26	47	24	44	22	40	20	37	18	34	16	31	13	28	11	24	7	21	4	18	45
46	32	58	30	54	29	51	27	48	26	45	24	42	22	38	20	35	18	32	15	29	13	26	10	23	7	20	46
47	33	59	31	55	30	52	29	49	27	46	25	43	24	40	22	37	20	34	17	31	15	28	12	25	10	22	47
48	35	60	33	56	32	53	30	50	29	47	27	44	25	41	23	38	22	35	19	32	17	29	14	26	12	23	48
49	36	60	34	57	33	54	31	51	30	48	28	45	27	42	25	39	23	36	21	33	19	30	17	28	14	25	49
50	37	61	35	58	34	55	33	52	31	49	30	46	28	43	27	40	25	37	23	35	21	32	19	29	17	26	50
51	38	62	37	59	36	56	34	53	33	50	31	47	30	45	28	42	27	39	25	36	23	33	21	30	19	28	51
52	40	63	38	60	37	57	36	54	34	51	33	48	31	46	30	43	28	40	27	37	25	35	23	32	21	29	52
53	41	63	39	61	38	58	37	55	36	52	34	49	33	47	31	44	30	41	28	38	27	36	25	33	23	31	53
54	42	64	41	61	40	59	39	56	37	53	36	50	34	48	33	45	31	42	30	39	28	37	27	34	25	32	54
55	43	65	42	62	41	59	40	57	39	54	37	51	36	49	34	46	33	43	31	40	30	38	28	36	27	33	55
56	44	65	43	63	42	60	41	57	40	55	39	52	37	50	36	47	34	44	33	42	31	39	30	37	28	34	56
57	46	66	45	64	44	61	42	58	41	55	40	53	39	50	37	48	36	45	35	43	33	40	31	38	30	36	57
58	47	67	46	64	45	61	44	59	42	56	41	53	40	51	39	49	37	46	36	44	35	42	33	39	31	37	58
59	48	67	47	65	46	62	45	60	44	57	43	54	41	52	40	49	39	47	38	45	36	43	35	40	33	38	59
60	49	68	48	65	47	63	46	60	45	58	44	55	43	53	41	50	40	48	39	46	38	44	36	41	35	39	60
61	50	68	49	66	48	63	47	61	46	58	45	56	44	54	43	51	42	49	41	47	39	44	38	42	36	40	61
62	52	69	51	66	50	64	49	61	48	59	47	57	45	54	44	52	43	50	42	47	41	45	39	43	38	41	62
63	53	69	52	67	51	64	50	62	49	60	48	57	47	55	45	53	44	51	43	48	42	46	41	44	39	42	63
64	54	70	53	67	52	65	51	62	50	60	49	58	48	56	47	53	46	51	45	49	43	47	42	45	41	43	64
65	55	70	54	68	53	65	52	63	51	61	50	59	49	56	48	54	47	52	46	50	45	48	43	46	42	44	65
66	56	71	55	68	54	66	53	63	52	61	51	59	50	57	49	55	48	53	47	51	46	49	45	47	44	45	66
67	57	71	56	69	55	66	55	64	54	62	53	60	52	58	51	55	50	53	48	51	47	49	46	47	45	45	67
68	58	71	57	69	57	67	56	65	55	63	54	60	53	58	52	56	51	54	50	52	49	50	47	48	46	46	68
69	59	72	58	70	58	67	57	65	56	63	55	61	54	59	53	57	52	55	51	53	50	51	49	49	48	47	69
70	61	72	60	70	59	68	58	66	57	64	56	62	55	60	54	57	53	55	52	53	51	52	50	50	49	48	70
71	62	72	61	70	60	68	59	66	58	64	57	62	56	60	55	58	55	56	54	54	53	52	52	50	51	48	71
72	63	73	62	71	61	69	60	67	59	65	59	63	58	61	57	59	56	57	55	55	54	52	53	51	52	49	72
73	64	73	63	71	62	69	62	67	61	65	60	63	59	61	58	59	57	57	56	55	55	53	54	52	53	50	73
74	65	74	64	72	63	70	63	68	62	66	61	64	60	62	59	60	58	58	57	56	56	54	55	52	54	50	74
75	66	74	65	72	64	70	64	68	63	66	62	64	61	62	60	60	59	58	58	56	57	55	56	53	56	51	75
76	67	74	66	72	65	70	65	68	64	66	63	64	62	63	61	61	61	59	60	57	59	55	58	53	57	52	76
77	68	74	67	73	67	71	66	69	65	67	64	65	63	63	62	61	62	59	61	57	60	56	59	54	58	52	77
78	69	75	68	73	68	71	67	69	66	67	66	65	65	63	64	62	63	60	62	58	61	56	60	54	59	53	78
79	70	75	69	73	69	71	68	70	67	68	67	66	66	64	65	62	64	60	63	58	62	57	61	55	61	53	79
80	72	75	71	73	70	72	69	70	68	68	68	66	67	64	66	63	65	61	64	59	63	57	62	55	62	54	80
	6.0		6.5		7.0		7.5		8.0		8.5		9.0		9.5		10.0		10.5		11.0		11.5		12.0		

XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

Depression of the wet-bulb thermometer ($t - t'$).

t F.	12.0		12.5		13.0		13.5		14.0		14.5		15.0		15.5		16.0		16.5		17.0		17.5		18.0		t F.
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	
40	—16	8	—34	4	—74	1																					40
41	—11	10	—19	6	—32	3																					41
42	— 6	12	—13	9	—22	6	—40	3																			42
43	— 2	14	— 8	11	—15	8	—25	5	—63	2																	43
44	1	16	— 4	13	— 9	10	—17	7	—28	4																	44
45	4	18	0	15	— 5	12	—11	9	—19	6	—34	2															45
46	7	20	3	17	— 1	14	— 6	11	—12	8	—21	5	—46	2													46
47	10	22	6	19	3	16	— 1	13	— 7	10	—14	7	—25	4	—61	1											47
48	12	23	9	20	6	18	2	15	— 2	12	— 8	9	—16	6	—28	3	—80	1									48
49	14	25	11	22	9	19	5	17	1	14	— 3	11	—10	8	—18	5	—32	3									49
50	17	26	14	23	11	21	8	18	5	16	0	13	— 5	10	—11	7	—20	5	—38	2							50
51	19	28	16	25	14	22	11	20	8	17	4	15	0	12	— 6	9	—12	7	—21	4	—46	2					51
52	21	29	18	26	16	24	13	21	11	19	7	16	3	13	— 1	11	— 6	9	—13	6	—23	4	—58	1			52
53	23	31	20	28	18	25	16	23	13	20	10	18	7	15	2	13	— 2	10	— 5	8	—15	5	—25	3	—74	1	53
54	25	32	23	29	20	27	18	24	16	22	13	19	10	17	6	14	2	12	— 2	10	— 8	7	—16	5	—28	2	54
55	27	33	25	31	23	28	20	26	18	23	15	21	12	18	9	16	6	14	2	11	— 3	9	— 9	7	—17	4	55
56	28	34	26	32	25	30	22	27	20	25	18	22	15	20	12	17	9	15	5	13	1	11	— 4	8	—10	6	56
57	30	36	28	33	26	31	24	28	22	26	20	24	18	21	15	19	12	17	9	14	5	12	0	10	— 4	8	57
58	31	37	30	34	28	32	26	29	24	27	22	25	20	23	18	20	15	18	12	16	9	14	4	12	0	10	58
59	33	38	32	36	30	33	28	31	26	29	24	26	22	24	20	22	18	20	15	17	12	15	8	13	4	11	59
60	35	39	33	37	32	34	30	32	28	30	26	28	24	25	22	23	20	21	18	19	15	17	12	15	8	13	60
61	36	40	35	38	33	35	32	33	30	31	28	29	26	27	24	24	22	22	20	20	18	18	15	16	12	14	61
62	38	41	37	39	35	37	34	34	32	32	30	30	28	28	26	26	24	24	22	22	20	20	18	18	15	16	62
63	39	42	38	40	37	38	35	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	63
64	41	43	39	41	38	38	37	36	35	34	34	32	32	30	30	28	28	26	26	24	24	22	22	20	20	18	64
65	42	44	41	42	40	39	38	37	37	35	35	33	34	31	32	29	30	27	28	25	27	24	25	22	23	20	65
66	44	45	43	42	41	40	40	38	38	36	37	34	35	32	34	30	32	29	30	27	29	25	27	23	25	21	66
67	45	45	44	43	43	41	41	39	40	37	39	35	37	33	36	32	34	30	32	28	31	26	29	24	27	22	67
68	46	46	45	44	44	42	43	40	42	38	40	36	39	34	38	33	36	31	34	29	33	27	31	25	29	23	68
69	48	47	47	45	46	43	45	41	43	39	42	37	40	35	39	33	38	32	36	30	34	28	33	26	31	24	69
70	49	48	48	46	47	44	46	42	45	40	43	38	42	36	41	34	39	33	38	31	36	29	35	27	33	26	70
71	51	48	49	46	48	45	47	43	46	41	45	39	43	37	42	35	41	34	39	32	38	30	36	28	35	27	71
72	52	49	51	47	50	45	49	43	47	42	46	40	45	38	44	36	43	35	41	33	40	31	38	29	37	28	72
73	53	50	52	48	51	46	50	44	49	42	48	41	46	39	45	37	44	35	43	34	41	32	40	30	38	29	73
74	54	50	53	48	52	47	51	45	50	43	49	41	48	40	47	38	45	36	44	35	43	33	41	31	40	30	74
75	56	51	55	49	54	47	53	46	52	44	50	42	49	40	48	39	47	37	45	35	44	34	43	32	42	31	75
76	57	52	56	50	55	48	54	46	53	45	52	43	50	41	49	39	48	38	47	36	46	35	45	33	43	31	76
77	58	52	57	50	56	49	55	47	54	45	53	44	52	42	51	40	50	39	49	37	48	35	46	34	45	32	77
78	59	53	58	51	57	49	56	48	55	46	54	44	53	43	52	41	51	39	50	38	49	36	48	35	47	33	78
79	61	53	60	52	59	50	58	48	57	47	56	45	55	43	54	42	53	40	52	39	51	37	49	36	48	34	79
80	62	54	61	52	60	51	59	49	58	47	57	45	56	44	55	42	54	41	53	39	52	38	51	36	50	35	80

	18.0		19.0		20.0		21.0		22.0		23.0		24.0		25.0		26.0		27.0		28.0		29.0		30.0		
59	4	11	— 5	7	—22	3																					59
60	8	13	0	9	—13	5	—63	1																			60
61	12	14	4	10	— 6	6	—25	2																			61
62	15	16	8	12	0	8	—14	4																			62
63	18	17	12	13	4	9	— 6	6	—26	2																	63
64	20	18	15	15	8	11	0	7	—15	4																	64
65	23	20	18	16	12	12	4	9	— 6	5	—28	2															65
66	25	21	20	17	15	14	8	10	— 1	7	—15	3															66
67	27	22	23	19	18	15	12	12	4	8	— 7	5	—28	1													67
68	29	23	25	20	20	16	15	13	8	10	— 1	6	—16	3													68
69	31	24	27	21	23	18	18	14	12	11	4	8	— 7	5	—32												69
70	33	26	29	22	25	19	21	16	15	12	9	9	0	6	—16	2											70
71	35	27	31	23	28	20	23	17	18	14	12	10	5	7	— 7	4	—32	1									71
72	37	28	33	24	30	21	26	18	21	15	16	12	9	9	0	6	—16	3									72
73	38	29	35	25	32	22	28	19	24	16	19	13	13	10	5	7	— 6	4	—30	1							73
74	40	30	37	26	34	23	30	20	26	17	22	14	16	11	9	8	0	6	—15	3							74
75	42	31	39	27	36	24	32	21	29	18	24	15	19	12	13	9	5	7	— 6	4	—28	1					75
76	43	31	41	28	38	25	34	22	31	19	27	16	22	14	17	11	10	8	— 1	5	—14	3					76
77	45	32	42	29	40	26	36	23	33	20	29	17	25	15	20	12	14	9	6	6	— 5	4	—26	1			77
78	47	33	44	30	41	27	38	24	35	21	31	18	28	16	23	13	17	10	11	8	2	5	—12	3			78
79	48	34	46	31	43	28	40	25	37	22	34	19	30	17	26	14	21	11	15	9	7	6	— 4	4	—23	1	79
80	50	35	47	32	45	29	42	26	39	23	36	20	32	18	28	15	24	13	18	10	12	7	3	5	—11	3	80

XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

Depression of the wet-bulb thermometer ($t - t'$).

t F.	1.0		2.0		3.0		4.0		5.0		6.0		7.0		8.0		9.0		10.0		11.0		12.0		t F.
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	
°																									°
80	79	96	77	92	76	87	74	83	73	79	72	75	70	72	68	68	67	64	65	61	63	57	62	54	**80**
81	80	96	78	92	77	88	75	84	74	80	73	76	71	72	70	68	68	65	66	61	65	58	63	54	**81**
82	81	96	79	92	78	88	77	84	75	80	74	76	72	72	71	69	69	65	68	62	66	58	64	55	**82**
83	82	96	80	92	79	88	78	84	76	80	75	76	73	73	72	69	70	66	69	62	67	59	65	55	**83**
84	83	96	81	92	80	88	79	84	77	80	76	77	74	73	73	69	71	66	70	63	68	59	67	56	**84**
85	84	96	82	92	81	88	80	84	78	80	77	77	75	73	74	70	72	66	71	63	69	60	68	56	**85**
86	85	96	83	92	82	88	81	84	79	81	78	77	76	73	75	70	73	67	72	63	71	60	69	57	**86**
87	86	96	84	92	83	88	82	84	80	81	79	77	78	74	76	70	74	67	73	64	72	60	70	57	**87**
88	87	96	85	92	84	88	83	85	81	81	80	77	79	74	77	71	75	67	74	64	73	61	71	58	**88**
89	88	96	86	92	85	88	84	85	82	81	81	78	80	74	78	71	76	68	76	64	74	61	72	58	**89**
90	89	96	87	92	86	88	85	85	84	81	82	78	81	75	79	71	78	68	77	65	75	62	74	59	**90**
91	90	96	88	92	87	89	86	85	85	82	83	78	82	75	80	71	79	68	78	65	76	62	75	59	**91**
92	91	96	89	92	88	89	87	85	86	82	84	78	83	75	82	72	80	69	79	65	77	62	76	59	**92**
93	92	96	91	93	89	89	88	85	87	82	85	78	84	75	83	72	81	69	80	66	78	63	77	60	**93**
94	93	96	92	93	90	89	89	86	88	82	86	79	85	75	84	72	82	69	81	66	80	63	78	60	**94**
95	94	96	93	93	91	89	90	86	89	82	87	79	86	76	85	72	83	69	82	66	81	63	79	60	**95**
96	95	96	94	93	92	89	91	86	90	82	88	79	87	76	86	73	84	70	83	67	82	64	80	61	**96**
97	96	96	95	93	93	89	92	86	91	82	90	79	88	76	87	73	86	70	84	67	83	64	81	61	**97**
98	97	96	96	93	94	89	93	86	92	83	91	79	89	76	88	73	87	70	85	67	84	64	83	61	**98**
99	98	96	97	93	95	89	94	86	93	83	92	80	90	76	89	73	88	70	86	68	85	65	84	62	**99**
100	99	97	98	93	96	90	95	86	94	83	93	80	91	77	90	74	89	71	87	68	86	65	85	62	**100**
101	100	97	99	93	97	90	96	86	95	83	94	80	92	77	91	74	90	71	88	68	87	65	86	62	**101**
102	101	97	100	93	98	90	97	86	96	83	95	80	93	77	92	74	91	71	90	68	88	65	87	63	**102**
103	102	97	101	93	99	90	98	87	97	83	96	80	94	77	93	74	92	71	91	69	89	66	88	63	**103**
104	103	97	102	93	100	90	99	87	98	83	97	80	96	77	94	74	93	72	92	69	90	66	89	63	**104**
105	104	97	103	93	101	90	100	87	99	84	98	81	97	78	95	75	94	72	93	69	91	66	90	64	**105**
106	105	97	104	93	102	90	101	87	100	84	99	81	98	78	96	75	95	72	94	69	93	66	91	64	**106**
107	106	97	105	93	103	90	102	87	101	84	100	81	99	78	97	75	96	72	95	69	94	67	92	64	**107**
108	107	97	106	93	104	90	103	87	102	84	101	81	100	78	98	75	97	72	96	70	95	67	93	64	**108**
109	108	97	107	93	105	90	104	87	103	84	102	81	101	78	99	75	98	73	97	70	96	67	94	65	**109**
110	109	97	108	94	107	90	105	87	104	84	103	81	102	78	101	76	99	73	98	70	97	67	96	65	**110**
111	110	97	109	94	108	90	106	87	105	84	104	81	103	78	102	76	100	73	99	70	98	68	97	65	**111**
112	111	97	110	94	109	90	107	87	106	84	105	82	104	79	103	76	101	73	100	71	99	68	98	65	**112**
113	112	97	111	94	110	90	108	87	107	85	106	82	105	79	104	76	102	73	101	71	100	68	99	66	**113**
114	113	97	112	94	111	91	109	88	108	85	107	82	106	79	105	76	103	74	102	71	101	68	100	66	**114**
115	114	97	113	94	112	91	110	88	109	85	108	82	107	79	106	76	105	74	103	71	102	69	101	66	**115**
116	115	97	114	94	113	91	111	88	110	85	109	82	108	79	107	76	106	74	104	71	103	69	102	66	**116**
117	116	97	115	94	114	91	112	88	111	85	110	82	109	79	108	77	107	74	105	71	104	69	103	66	**117**
118	117	97	116	94	115	91	113	88	112	85	111	82	110	79	109	77	108	74	106	72	105	69	104	67	**118**
119	118	97	117	94	116	91	114	88	113	85	112	82	111	80	110	77	109	74	107	72	106	69	105	67	**119**
120	119	97	118	94	117	91	115	88	114	85	113	83	112	80	111	77	110	75	108	72	107	70	106	67	**120**
121	120	97	119	94	118	91	117	88	115	85	114	83	113	80	112	77	111	75	110	72	108	70	107	67	**121**
122	121	97	120	94	119	91	118	88	116	85	115	83	114	80	113	77	112	75	111	72	109	70	108	67	**122**
123	122	97	121	94	120	91	119	88	117	85	116	83	115	80	114	78	113	75	112	73	110	70	109	68	**123**
124	123	97	122	94	121	91	120	88	118	85	117	83	116	80	115	78	114	75	113	73	111	70	110	68	**124**
125	124	97	123	94	122	91	121	88	119	86	118	83	117	80	116	78	115	75	114	73	112	70	111	68	**125**
126	125	97	124	94	123	91	122	88	120	86	119	83	118	80	117	78	116	75	115	73	114	71	112	68	**126**
127	126	97	125	94	124	91	123	89	121	86	120	83	119	81	118	78	117	76	116	73	115	71	113	68	**127**
128	127	97	126	94	125	91	124	89	122	86	121	83	120	81	119	78	118	76	117	73	116	71	114	68	**128**
129	128	97	127	94	126	91	125	89	123	86	122	83	121	81	120	78	119	76	118	73	117	71	115	69	**129**
130	129	97	128	94	127	91	126	89	124	86	123	83	122	81	121	78	120	76	119	74	118	71	117	69	**130**
131	130	97	129	94	128	92	127	89	125	86	124	84	123	81	122	79	121	76	120	74	119	71	118	69	**131**
132	131	97	130	94	129	92	128	89	126	86	125	84	124	81	123	79	122	76	121	74	120	72	119	69	**132**
133	132	97	131	94	130	92	129	89	128	86	126	84	125	81	124	79	123	76	122	74	121	72	120	69	**133**
134	133	97	132	94	131	92	130	89	129	86	127	84	126	81	125	79	124	76	123	74	122	72	121	70	**134**
135	134	97	133	94	132	92	131	89	130	86	128	84	127	81	126	79	125	77	124	74	123	72	122	70	**135**
136	135	97	134	94	133	92	132	89	131	87	129	84	128	82	127	79	126	77	125	74	124	72	123	70	**136**
137	136	97	135	94	134	92	133	89	132	87	130	84	129	82	128	79	127	77	126	74	125	72	124	70	**137**
138	137	97	136	95	135	92	134	89	133	87	131	84	130	82	129	79	128	77	127	74	126	73	125	70	**138**
139	138	97	137	95	136	92	135	89	134	87	132	84	131	82	130	79	129	77	128	75	127	73	126	70	**139**
140	139	97	138	95	137	92	136	89	135	87	133	84	132	82	131	79	130	77	129	75	128	73	127	71	**140**
	1.0		**2.0**		**3.0**		**4.0**		**5.0**		**6.0**		**7.0**		**8.0**		**9.0**		**10.0**		**11.0**		**12.0**		

XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

Depression of the wet-bulb thermometer ($t - t'$).

t F.	12.0		13.0		14.0		15.0		16.0		17.0		18.0		19.0		20.0		21.0		22.0		23.0		24.0		t F.
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	
°																											°
80	62	54	60	51	58	47	56	44	54	41	52	38	50	35	47	32	45	29	42	26	39	23	36	20	32	18	**80**
81	63	54	61	51	59	48	57	44	55	41	53	38	51	35	49	33	47	30	44	27	41	24	38	21	35	19	**81**
82	64	55	62	52	61	48	59	45	57	42	55	39	53	36	50	33	48	31	45	28	43	25	40	22	37	20	**82**
83	65	55	64	52	62	49	60	46	58	43	56	40	54	37	52	34	50	31	47	29	44	26	42	23	39	21	**83**
84	67	56	65	53	63	49	61	46	59	44	57	41	55	38	53	35	51	32	49	29	46	27	43	24	41	22	**84**
85	68	56	66	53	64	50	62	47	61	44	59	41	57	38	55	36	53	33	50	30	48	28	45	25	42	22	**85**
86	69	57	67	54	66	51	64	48	62	45	60	42	58	39	56	36	54	34	52	31	49	29	47	26	44	23	**86**
87	70	57	68	54	67	51	65	48	63	45	61	42	59	40	57	37	55	34	53	32	51	30	48	27	46	24	**87**
88	71	58	70	55	68	52	66	49	64	46	63	43	61	40	59	38	57	35	55	32	53	30	50	27	48	25	**88**
89	72	58	71	55	69	52	67	49	66	46	64	44	62	41	60	38	58	36	56	33	54	31	52	28	49	26	**89**
90	74	59	72	56	70	53	69	50	67	47	65	44	63	41	62	39	60	36	58	34	56	32	53	29	51	26	**90**
91	75	59	73	56	72	53	70	50	68	47	67	45	65	42	63	39	61	37	59	35	57	33	55	30	53	27	**91**
92	76	59	74	56	73	54	71	51	69	48	68	45	66	43	64	40	62	37	60	35	58	33	56	30	54	28	**92**
93	77	60	75	57	74	54	72	51	71	48	69	46	67	43	66	41	64	38	62	36	60	34	58	31	56	29	**93**
94	78	60	77	57	75	54	73	52	72	49	70	46	69	44	67	41	65	39	63	36	61	34	59	31	57	29	**94**
95	79	60	78	58	76	55	75	52	73	49	71	47	70	44	68	42	66	39	64	37	63	35	61	32	59	30	**95**
96	80	61	79	58	77	55	76	53	74	50	73	47	71	45	69	42	68	40	66	37	64	36	62	33	60	30	**96**
97	81	61	80	58	78	56	77	53	75	50	74	48	72	45	71	43	69	40	67	38	65	36	63	33	61	31	**97**
98	83	61	81	59	80	56	78	53	77	51	75	48	73	46	72	43	70	41	68	38	67	37	65	34	63	32	**98**
99	84	62	82	59	81	56	79	54	78	51	76	49	75	46	73	44	71	41	70	39	68	37	66	34	64	32	**99**
100	85	62	83	59	82	57	80	54	79	51	77	49	76	47	74	44	73	42	71	39	69	37	67	35	66	33	**100**
101	86	62	84	60	83	57	82	54	80	52	79	49	77	47	75	45	74	42	72	40	71	38	69	36	67	33	**101**
102	87	63	85	60	84	57	83	55	81	52	80	50	78	47	77	45	75	43	73	40	72	38	70	36	68	34	**102**
103	88	63	87	60	85	58	84	55	82	53	81	50	79	48	78	45	76	43	75	41	73	39	71	37	70	34	**103**
104	89	63	88	61	86	58	85	55	83	53	82	51	81	48	79	46	78	44	76	41	74	39	73	37	71	35	**104**
105	90	64	89	61	87	58	86	56	85	53	83	51	82	49	80	46	79	44	77	42	76	40	74	38	72	35	**105**
106	91	64	90	61	89	59	87	56	86	54	84	51	83	49	81	47	80	44	78	42	77	40	75	38	74	36	**106**
107	92	64	91	62	90	59	88	57	87	54	85	52	84	49	83	47	81	45	80	43	78	41	76	38	75	36	**107**
108	93	64	92	62	91	59	89	57	88	54	87	52	85	50	84	47	82	45	81	43	79	41	78	39	76	37	**108**
109	94	65	93	62	92	60	90	57	89	55	88	52	86	50	85	48	83	46	82	44	80	41	79	39	77	37	**109**
110	96	65	94	62	93	60	92	57	90	55	89	53	87	50	86	48	85	46	83	44	82	42	80	40	79	38	**110**
111	97	65	95	63	94	60	93	58	91	55	90	53	89	51	87	49	86	46	84	44	83	42	81	40	80	38	**111**
112	98	65	96	63	95	60	94	58	92	56	91	53	90	51	88	49	87	47	85	45	84	43	83	40	81	39	**112**
113	99	66	97	63	96	61	95	58	93	56	92	54	91	51	89	49	88	47	87	45	85	43	84	41	82	39	**113**
114	100	66	99	63	97	61	96	59	95	56	93	54	92	52	91	50	89	48	88	45	86	44	85	41	83	39	**114**
115	101	66	100	64	98	61	97	59	96	57	94	54	93	52	92	50	90	48	89	46	88	44	86	42	85	40	**115**
116	102	66	101	64	99	61	98	59	97	57	95	55	94	52	93	50	91	48	90	46	89	44	87	42	86	40	**116**
117	103	66	102	64	100	62	99	59	98	57	96	55	95	53	94	51	93	49	91	46	90	44	88	43	87	41	**117**
118	104	67	103	64	101	62	100	60	99	57	97	55	96	53	95	51	94	49	92	47	91	45	90	43	88	41	**118**
119	105	67	104	64	103	62	101	60	100	58	99	55	97	53	96	51	95	49	93	47	92	45	91	43	89	41	**119**
120	106	67	105	65	104	62	102	60	101	58	100	56	99	54	97	51	96	49	95	47	93	45	92	44	90	42	**120**
121	107	67	106	65	105	63	103	60	102	58	101	56	100	54	98	52	97	50	96	48	94	46	93	44	92	42	**121**
122	108	67	107	65	106	63	105	61	103	58	102	56	101	54	99	52	98	50	97	48	96	46	94	44	93	42	**122**
123	109	68	108	65	107	63	106	61	104	59	103	57	102	54	101	52	99	50	98	48	97	46	95	45	94	43	**123**
124	110	68	109	66	108	63	107	61	105	59	104	57	103	55	102	53	100	51	99	49	98	47	96	45	95	43	**124**
125	111	68	110	66	109	64	108	62	106	59	105	57	104	55	103	53	101	51	100	49	99	47	98	45	96	43	**125**
126	112	68	111	66	110	64	109	62	108	59	106	57	105	55	104	53	103	51	101	49	100	47	99	46	97	44	**126**
127	113	68	112	66	111	64	110	62	109	60	107	58	106	55	105	54	104	52	102	50	101	48	100	46	98	44	**127**
128	114	68	113	66	112	64	111	62	110	60	108	58	107	56	106	54	105	52	103	50	102	48	101	46	100	44	**128**
129	115	69	114	66	113	64	112	62	111	60	110	58	108	56	107	54	106	52	105	50	103	48	102	46	101	45	**129**
130	117	69	115	67	114	65	113	62	112	60	111	58	109	56	108	54	107	52	106	50	104	49	103	47	102	45	**130**
131	118	69	116	67	115	65	114	63	113	60	112	58	110	56	109	54	108	53	107	51	106	49	104	47	103	46	**131**
132	119	69	117	67	116	65	115	63	114	61	113	59	112	57	110	55	109	53	108	51	107	49	105	47	104	46	**132**
133	120	69	118	67	117	65	116	63	115	61	114	59	113	57	111	55	110	53	109	51	108	49	106	48	105	46	**133**
134	121	70	120	67	118	65	117	63	116	61	115	59	114	57	112	55	111	53	110	51	109	50	108	48	106	46	**134**
135	122	70	121	68	119	65	118	63	117	61	116	59	115	57	113	55	112	53	111	51	110	50	109	48	107	46	**135**
136	123	70	122	68	120	66	119	64	118	61	117	59	116	58	115	56	113	54	112	52	111	50	110	48	108	47	**136**
137	124	70	123	68	121	66	120	64	119	62	118	60	117	58	116	56	114	54	113	52	112	50	111	49	110	47	**137**
138	125	70	124	68	122	66	121	64	120	62	119	60	118	58	117	56	115	54	114	52	113	51	112	49	111	47	**138**
139	126	70	125	68	124	66	122	64	121	62	120	60	119	58	118	56	117	54	115	53	114	51	113	49	112	47	**139**
140	127	71	126	68	125	66	123	64	122	62	121	60	120	58	119	56	118	55	116	53	115	51	114	49	113	48	**140**
	12.0		**13.0**		**14.0**		**15.0**		**16.0**		**17.0**		**18.0**		**19.0**		**20.0**		**21.0**		**22.0**		**23.0**		**24.0**		

DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

Depression of the wet-bulb thermometer ($t - t'$).

t F.	24.0		25.0		26.0		27.0		28.0		29.0		30.0		31.0		32.0		33.0		34.0		35.0		36.0		t F.
	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	d. p.	r. h.	
°																											°
80	32	18	28	15	24	13	18	10	12	7	3	5	—11	3	—74	1											80
81	35	19	31	16	26	14	22	11	16	9	8	6	— 2	4	—21	2											81
82	37	20	33	17	29	15	25	12	19	10	13	7	4	5	— 9	3	—54	1									82
83	39	21	35	18	31	16	27	13	22	11	17	8	9	6	— 1	4	—19	2									83
84	41	22	37	19	34	17	30	14	25	12	20	9	14	7	6	5	— 7	3	—40	1							84
85	42	22	39	20	36	17	32	15	28	13	23	10	18	8	11	6	1	4	—16	2							85
86	44	23	41	21	38	18	35	16	30	14	26	11	21	9	15	7	7	5	— 5	3	—30	1					86
87	46	24	43	22	40	19	37	17	33	15	29	12	24	10	19	8	12	6	3	4	—12	2					87
88	48	25	45	22	42	20	39	18	35	16	31	13	27	11	22	9	16	7	8	5	— 2	3	—25	1			88
89	49	26	47	23	44	21	41	19	38	16	34	14	30	12	25	10	20	8	13	6	4	4	—10	2			89
90	51	26	48	24	46	22	43	20	40	17	36	15	32	13	28	11	23	9	17	7	10	5	— 1	3	—20	1	90
91	53	27	50	25	47	23	45	20	42	18	38	16	35	14	31	12	26	10	21	8	15	6	6	4	— 7	2	91
92	54	28	52	26	49	23	46	21	44	19	41	17	37	15	34	13	29	11	25	9	19	7	12	5	1	3	92
93	56	29	53	26	51	24	48	22	46	20	43	18	39	16	36	14	32	12	28	10	23	8	16	6	8	4	93
94	57	29	55	27	53	25	50	23	47	21	45	18	42	16	38	14	35	13	31	11	26	9	20	7	13	5	94
95	59	30	56	28	54	25	52	23	49	21	46	19	44	17	40	15	37	13	33	11	29	10	24	8	18	6	95
96	60	30	58	28	56	26	53	24	51	22	48	20	46	18	43	16	39	14	36	12	32	10	27	9	22	7	96
97	61	31	59	29	57	27	55	25	53	23	50	21	47	19	45	17	41	15	38	13	34	11	30	10	25	8	97
98	63	32	61	29	59	27	57	25	54	23	52	21	49	19	47	18	44	16	40	14	37	12	33	10	28	9	98
99	64	32	62	30	60	28	58	26	56	24	54	22	51	20	48	18	46	16	43	15	39	13	35	11	31	9	99
100	66	33	64	31	62	29	60	27	57	25	55	23	53	21	50	19	48	17	45	15	41	14	38	12	34	10	100
101	67	33	65	31	63	29	61	27	59	25	57	23	54	21	52	20	49	18	47	16	44	14	40	13	37	11	101
102	68	34	66	32	65	30	63	28	61	26	58	24	56	22	54	20	51	19	49	17	46	15	43	13	39	12	102
103	70	34	68	32	66	30	64	28	62	26	60	25	58	23	55	21	53	19	50	17	48	16	45	14	41	12	103
104	71	35	69	33	67	31	65	29	63	27	61	25	59	23	57	22	55	20	52	18	50	16	47	15	44	13	104
105	72	35	70	33	69	31	67	30	65	28	63	26	61	24	59	22	56	20	54	19	52	17	49	15	46	14	105
106	74	36	72	34	70	32	68	30	66	28	64	26	62	25	60	23	58	21	56	19	53	18	51	16	48	14	106
107	75	36	73	34	71	32	70	31	68	29	66	27	64	25	62	23	60	22	57	20	55	18	52	17	50	15	107
108	76	37	74	35	73	33	71	31	69	29	67	27	65	26	63	24	61	22	59	21	57	19	54	17	52	16	108
109	77	37	76	35	74	33	72	32	71	30	69	28	67	26	65	25	63	23	61	21	58	20	56	18	54	16	109
110	79	38	77	36	75	34	74	32	72	30	70	28	68	27	66	25	64	23	62	22	60	20	58	19	55	17	110
111	80	38	78	36	77	34	75	33	73	31	71	29	70	27	68	26	66	24	64	22	62	21	59	19	57	18	111
112	81	39	79	37	78	35	76	33	74	31	73	29	71	28	69	26	67	24	65	23	63	21	61	20	59	18	112
113	82	39	81	37	79	35	77	33	76	32	74	30	72	28	71	27	69	25	67	23	65	22	63	20	60	19	113
114	83	39	82	38	80	36	79	34	77	32	75	30	74	29	72	27	70	25	68	24	66	22	64	21	62	19	114
115	85	40	83	38	82	36	80	34	78	33	77	31	75	29	73	28	72	26	70	24	68	23	66	21	64	20	115
116	86	40	84	39	83	37	81	35	80	33	78	31	76	30	75	28	73	26	71	25	69	23	67	22	65	20	116
117	87	41	85	39	84	37	82	35	81	33	79	32	78	30	76	29	74	27	72	25	71	24	69	22	67	21	117
118	88	41	87	39	85	37	84	36	82	34	81	32	79	31	77	29	76	27	74	26	72	24	70	23	68	21	118
119	89	41	88	40	86	38	85	36	83	34	82	33	80	31	79	29	77	28	75	26	74	25	72	23	70	22	119
120	90	42	89	40	88	38	86	36	85	35	83	33	82	31	80	30	78	28	77	27	75	25	73	24	71	22	120
121	92	42	90	40	89	38	87	37	86	35	84	33	83	32	81	30	80	29	78	27	76	26	74	24	73	23	121
122	93	42	91	41	90	39	89	37	87	35	86	34	84	32	83	31	81	29	79	28	78	26	76	25	74	23	122
123	94	43	93	41	91	39	90	37	88	36	87	34	85	33	84	31	82	29	81	28	79	26	77	25	75	24	123
124	95	43	94	41	92	40	91	38	89	36	88	35	87	33	85	31	83	30	82	28	80	27	79	25	77	24	124
125	96	43	95	42	93	40	92	38	91	37	89	35	88	33	86	32	85	30	83	29	82	27	80	26	78	24	125
126	97	44	96	42	95	40	93	39	92	37	90	35	89	34	87	32	86	31	84	29	83	28	81	26	80	25	126
127	98	44	97	42	96	41	94	39	93	37	92	36	90	34	89	32	87	31	86	30	84	28	83	27	81	25	127
128	100	44	98	43	97	41	96	39	94	38	93	36	91	34	90	33	88	31	87	30	85	29	84	27	82	26	128
129	101	45	99	43	98	41	97	40	95	38	94	36	93	35	91	33	90	32	88	30	87	29	85	28	84	26	129
130	102	45	101	43	99	42	98	40	97	38	95	37	94	35	92	33	91	32	89	31	88	29	86	28	85	27	130
131	103	45	102	44	100	42	99	40	98	39	96	37	95	35	94	34	92	32	91	31	89	30	88	28	86	27	131
132	104	46	103	44	101	42	100	40	99	39	97	37	96	36	95	34	93	33	92	31	90	30	89	29	87	27	132
133	105	46	104	44	103	42	101	41	100	39	99	38	97	36	96	35	94	33	93	32	92	30	90	29	89	28	133
134	106	46	105	44	104	43	102	41	101	39	100	38	98	36	97	35	96	33	94	32	93	31	91	29	90	28	134
135	107	46	106	45	105	43	104	41	102	40	101	38	100	37	98	35	97	34	95	32	94	31	93	30	91	28	135
136	108	47	107	45	106	43	105	42	103	40	102	39	101	37	99	36	98	34	97	33	95	31	94	30	92	29	136
137	110	47	108	45	107	44	106	42	104	40	103	39	102	37	101	36	99	34	98	33	96	32	95	30	94	29	137
138	111	47	109	45	108	44	107	42	106	41	104	39	103	38	102	36	100	35	99	33	98	32	96	31	95	30	138
139	112	47	110	46	109	44	108	42	107	41	105	39	104	38	103	37	101	35	100	34	99	32	97	31	96	30	139
140	113	48	112	46	110	44	109	43	108	41	107	40	105	38	104	37	103	35	101	34	100	33	99	31	97	30	140
	24.0		25.0		26.0		27.0		28.0		29.0		30.0		31.0		32.0		33.0		34.0		35.0		36.0		

XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

Depression of the wet-bulb thermometer ($t - t'$).

t F.	36.0		37.0		38.0		39.0		40.0		41.0		42.0		43.0		44.0		45.0		46.0		47.0		48.0		t F.
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	
°																											°
90	—20	1																									90
91	— 7	2	—46	0																							91
92	1	3	—16	1																							92
93	8	4	— 4	2	—30	1																					93
94	13	5	4	3	—11	2																					94
95	18	6	10	4	— 1	3	—22	1																			95
96	22	7	15	5	6	3	— 7	2	—62	0																	96
97	25	8	19	6	12	4	1	3	—16	1																	97
98	28	9	23	7	17	5	8	4	— 4	2	—30	0															98
99	31	9	27	8	21	6	14	5	4	3	—11	1															99
100	34	10	30	9	25	7	19	5	11	4	0	2															100
101	37	11	32	9	28	8	23	6	16	5	7	3															101
102	39	12	35	10	31	9	26	7	20	5	13	4	3	2	—15	1											102
103	41	12	38	11	34	9	29	8	24	6	18	5	10	3	— 2	2	—28	0									103
104	44	13	40	12	37	10	32	8	28	7	22	6	15	4	6	3	— 9	1									104
105	46	14	43	12	39	11	35	9	31	8	26	6	20	5	12	4	1	2	—20	1							105
106	48	14	45	13	42	11	38	10	34	8	29	7	24	6	17	4	9	3	— 4	2	—46	0					106
107	50	15	47	14	44	12	40	11	37	9	32	8	28	6	22	5	15	4	4	3	—12	1					107
108	52	16	49	14	46	13	43	11	39	10	35	9	31	7	26	6	19	4	11	3	0	2	—23	0			108
109	54	16	51	15	48	13	45	12	42	10	38	9	34	8	30	6	24	5	17	4	8	3	— 6	1	—74	0	109
110	55	17	53	15	50	14	47	13	44	11	41	10	37	8	33	7	28	6	21	5	14	4	4	2	—15	1	110
111	57	18	54	16	52	15	49	13	46	12	43	10	39	9	35	8	31	7	25	5	19	4	11	3	— 1	1	111
112	59	18	56	17	54	15	51	14	48	12	45	11	42	10	38	8	34	7	29	6	24	5	16	4	7	2	112
113	60	19	58	17	56	16	53	14	50	13	47	12	44	10	41	9	37	8	32	7	28	5	21	4	14	3	113
114	62	19	60	18	58	16	55	15	52	14	50	12	47	11	43	10	40	8	35	7	31	6	26	5	19	4	114
115	64	20	62	18	59	17	57	16	54	14	52	13	49	12	46	10	42	9	38	8	34	7	30	5	24	4	115
116	65	20	63	19	61	17	59	16	56	15	54	13	51	12	48	11	45	10	41	8	37	7	33	6	28	5	116
117	67	21	65	19	63	18	60	17	58	15	56	14	53	13	50	11	47	10	44	9	40	8	36	7	31	6	117
118	68	21	66	20	64	18	62	17	60	16	57	15	55	13	52	12	49	11	46	10	43	8	39	7	34	6	118
119	70	22	68	20	66	19	64	18	61	16	59	15	57	14	54	12	51	11	48	10	45	9	42	8	37	7	119
120	71	22	69	21	67	19	65	18	63	17	61	16	59	14	56	13	53	12	50	11	47	10	44	9	40	8	120
121	73	23	71	21	69	20	67	18	65	17	63	16	60	15	58	13	55	12	52	11	50	10	47	9	43	8	121
122	74	23	72	22	70	20	68	19	66	18	64	17	62	15	60	14	57	13	54	12	52	11	49	10	46	9	122
123	75	24	74	22	72	21	70	19	68	18	66	17	64	16	61	14	59	13	56	12	54	11	51	10	48	9	123
124	77	24	75	23	73	21	71	20	69	19	67	18	65	16	63	15	61	14	58	13	56	12	53	11	50	9	124
125	78	24	76	23	75	22	73	20	71	19	69	18	67	17	65	15	63	14	60	13	58	12	55	11	52	10	125
126	80	25	78	23	76	22	74	21	73	20	71	19	69	17	67	16	64	15	62	14	60	13	57	12	54	10	126
127	81	25	79	24	78	23	76	21	74	20	72	19	70	18	68	16	66	15	64	14	62	13	59	12	56	11	127
128	82	26	81	24	79	23	77	22	75	21	74	19	72	18	70	17	68	16	65	15	63	14	61	13	58	11	128
129	84	26	82	25	80	24	79	22	77	21	75	20	73	19	71	17	69	16	67	15	65	14	63	13	60	12	129
130	85	27	83	25	82	24	80	23	78	21	76	20	75	19	73	18	71	17	69	16	67	15	64	14	62	12	130
131	86	27	85	26	83	24	81	23	80	22	78	21	76	19	74	18	72	17	70	16	68	15	66	14	64	13	131
132	87	27	86	26	84	25	83	23	81	22	79	21	78	20	76	19	74	18	72	16	70	15	68	14	66	13	132
133	89	28	87	26	86	25	84	24	82	23	81	21	79	20	77	19	75	18	73	17	71	16	69	15	67	14	133
134	90	28	88	27	87	25	85	24	84	23	82	22	80	21	79	19	77	18	75	17	73	16	71	15	69	14	134
135	91	28	90	27	88	26	87	24	85	23	83	22	82	21	80	20	78	19	76	18	75	17	73	16	71	15	135
136	92	29	91	27	89	26	88	25	86	24	85	22	83	21	81	20	80	19	78	18	76	17	74	16	72	15	136
137	94	29	92	28	91	26	89	25	88	24	86	23	84	22	83	20	81	19	79	18	78	17	76	16	74	15	137
138	95	30	93	28	92	27	90	25	89	24	87	23	86	22	84	21	82	20	81	19	79	18	77	17	75	16	138
139	96	30	95	28	93	27	92	26	90	25	89	24	87	22	85	21	84	20	82	19	80	18	79	17	77	16	139
140	97	30	96	29	94	28	93	26	91	25	90	24	88	23	87	22	85	21	83	20	82	18	80	17	78	16	140
	36.0		37.0		38.0		39.0		40.0		41.0		42.0		43.0		44.0		45.0		46.0		47.0		48.0		

TABLE XXII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

PART II.

Reduction of dew-point for pressure.

$t-t'$ F.	30″	29″	28″	27″	26″	25″	24″	23″	22″	21″	20″	19″	18″	$t-t'$ F.
°														°
1	—.000	+.000	.001	.001	.001	.002	.002	.003	.003	.003	.004	.004	.004	1
2	—.000	+.000	.001	.002	.002	.003	.004	.005	.006	.006	.007	.008	.008	2
3	—.001	+.000	.001	.002	.003	.004	.006	.007	.008	.009	.010	.011	.012	3
4	—.001	+.000	.002	.003	.005	.006	.008	.009	.011	.012	.014	.015	.017	4
5	—.001	+.001	.002	.004	.006	.008	.010	.012	.014	.015	.017	.019	.021	5
6	—.001	+.001	.003	.005	.008	.010	.012	.014	.016	.019	.021	.023	.025	6
7	—.001	+.001	.003	.006	.009	.012	.014	.017	.019	.022	.024	.027	.030	7
8	—.001	+.001	.004	.007	.010	.013	.016	.019	.022	.025	.028	.031	.034	8
9	—.001	+.002	.005	.008	.012	.015	.018	.022	.025	.028	.032	.035	.038	9
10	—.002	+.002	.005	.009	.013	.017	.020	.024	.027	.031	.035	.039	.043	10
11	—.002	+.002	.006	.010	.014	.018	.022	.026	.030	.034	.038	.043	.047	11
12	—.003	+.002	.006	.010	.015	.019	.024	.028	.032	.037	.041	.046	.051	12
13	—.003	+.002	.006	.011	.016	.021	.026	.030	.035	.040	.045	.050	.055	13
14	—.004	+.002	.007	.012	.017	.022	.028	.033	.038	.043	.048	.054	.059	14
15	—.004	+.002	.007	.013	.019	.024	.030	.035	.041	.046	.052	.058	.063	15
16	—.004	+.002	.008	.014	.020	.026	.032	.038	.044	.049	.055	.061	.067	16
17	—.004	+.002	.008	.015	.021	.027	034	.040	.046	.053	.059	.065	.072	17
18	—.004	+.002	.009	.016	.022	.029	.036	.042	.049	.056	.062	.069	.076	18
19	—.005	+.002	.009	.017	.024	.031	.038	.045	.052	.059	.066	.073	.080	19
20	—.005	+.003	.010	.018	.026	.033	.041	.048	.055	.063	.070	.077	.085	20
21	—.005	+.003	.011	.019	.027	.034	.042	.050	.058	.066	.073	.081	.089	21
22	—.005	+.003	.011	.020	.028	.036	.044	.052	.061	.069	.077	.085	.093	22
23	—.005	+.003	.012	.021	.029	.038	.046	.055	.063	.072	.081	.089	.098	23
24	—.005	+.004	.013	.021	.030	.039	.048	.057	.066	.075	.084	.093	.102	24
25	—.006	+.004	.013	.022	.032	.041	.050	.060	.069	.078	.088	.097	.106	25
26	—.006	+.004	.013	.023	.033	.043	.052	.062	.072	.081	.091	.101	.111	26
27	—.006	+.004	.014	.024	.034	.044	.054	.065	.075	.085	.095	.105	.115	27
28	—.006	+.004	.015	.025	.036	.046	.056	.067	.077	.088	.098	.109	.119	28
29	—.007	+.004	.015	.026	.037	.048	.059	.069	.080	.091	.102	.113	.124	29
30	—.007	+.004	.016	.027	.038	.049	.061	.072	.083	.094	.105	.117	.128	30
31	—.007	+.005	.016	.028	.039	.051	.063	.074	.086	.097	.109	.121	.132	31
32	—.007	+.005	.017	.029	.041	.053	.065	.077	.089	.101	.113	.125	.137	32
33	—.007	+.005	.017	.030	.042	.054	.067	.079	.092	.104	.116	.129	.141	33
34	—.008	+.005	.018	.031	.043	.056	.069	.082	.094	.107	.120	.133	.145	34
35	—.008	+.005	.018	.032	.045	.058	.071	.084	.097	.110	.123	.137	.150	35
36	—.008	+.005	.019	.032	.046	.059	.073	.086	.100	.114	.127	.141	.154	36
37	—.008	+.006	.019	.033	.047	.061	.075	.089	.103	.117	.131	.145	.158	37
38	—.009	+ 006	.020	.034	.049	.063	.077	.091	.106	.120	.134	.149	.163	38
39	—.009	+.006	.021	.035	.050	.065	.079	.094	.109	.123	.138	.153	.167	39
40	—.009	+.006	.021	.036	.051	.066	.081	.096	.111	.126	.142	.157	.172	40

XXIII.—DEW-POINT AND RELATIVE HUMIDITY. ENGLISH.

PART III.

Correction of Dew-Point for Pressure.

Add to dew-point at 29.4″.

AIR PRESSURE.

t F.	27″ $t-t'$					26″ $t-t'$					25″ $t-t'$				
	5	10	15	20	25	5	10	15	20	25	5	10	15	20	25
°															
— 10	0														
0	0														
10	0														
20	0														
30	0					2					2				
40	0	3				1					1				
50	0	2	3			1	2				1	3			
60	0	1	2	3		0	1	3			1	2	4		
70	0	0	1	2	4	0	1	2	4		0	1	2	5	
80	0	0	1	1	3	0	1	1	2	5	0	1	1	3	6
90	0	0	0	1	2	0	0	1	1	2	0	1	1	2	3
100	0	0	0	1	1	0	0	1	1	2	0	0	1	1	2

t F.	24″ $t-t'$									23″ $t-t'$									
	1	2	3	4	5	10	15	20	25	1	2	3	4	5	10	15	20	25
— 10	2									3								
0	1	3								2	4							
10	1	2	4							1	2	4						
20	0	1	2	3						1	2	2	4					
30	0	0	1	2	3					0	1	2	2	3				
40	0	0	0	1	2					0	0	1	1	2				
50	0	0	0	1	1	3				0	0	0	0	1	4			
60	0	0	0	0	1	2	5			0	0	0	0	1	2	6		
70	0	0	0	0	0	1	3	6		0	0	0	0	1	2	3	7	
80	0	0	0	0	0	1	2	3	7	0	0	0	0	0	1	2	4	
90	0	0	0	0	0	1	1	2	4	0	0	0	0	0	1	1	2	4
100	0	0	0	0	0	1	1	2	3	0	0	0	0	0	1	1	2	3

	22″									21″									20″								
	1	2	3	4	5	10	15	20	25	1	2	3	4	5	10	15	20	25	1	2	3	4	5	10	15	20	25
— 10	2									3									4								
0	1	5								2	6								2	6							
10	1	3	5							1	3	6							2	3	6						
20	0	2	3	5						1	2	3	5						1	2	3	5					
30	0	1	2	3	4					0	1	2	3	4					0	1	2	3	4				
40	0	0	1	1	2					0	0	1	1	2					0	0	1	2	3				
50	0	0	0	0	1	4				0	0	0	0	1	5				0	0	0	1	2	6			
60	0	0	0	0	1	3	7			0	0	0	0	1	3	7			0	0	0	0	1	3	8		
70	0	0	0	0	1	2	4	8		0	0	0	0	1	2	4	9		0	0	0	0	1	2	5		
80	0	0	0	0	0	1	2	4		0	0	0	0	1	1	3	5		0	0	0	0	1	2	3	5	
90	0	0	0	0	0	1	2	3	5	0	0	0	0	0	1	2	3	6									

	19″									18″								
	1	2	3	4	5	10	15	20		1	2	3	4	5	10	15	20	
— 10	4									4								
0	2	7								2	7							
10	2	4	7							2	4	7						
20	1	2	4	6						1	3	4	7					
30	0	1	2	4	5					1	2	3	4	5				
40	0	0	1	2	3					0	1	2	2	3				
50	0	0	0	1	2	6				0	0	1	1	2	7			
60	0	0	0	0	1	4	9			0	0	0	1	1	4			
70	0	0	0	0	1	3	5			0	0	0	0	1	3	6		
80	0	0	0	0	1	2	3	6		0	0	0	0	1	2	4	6	

TABLE XXIII.—DEW-POINT AND RELATIVE HUMIDITY. FRENCH.

(Original.)

$x = f - .00068\,(t - t')\,p.$ $p = 750\ mm.$

Depression of wet-bulb $(t - t')$.

t C.	0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		6.5		7.0		t C.
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	
°																													°
— 15	-18	78	-22	57	-27	35																							— 15
— 14	-17	80	-20	60	-25	39																							— 14
— 13	-16	81	-19	63	-23	43	-29	25																					— 13
— 12	-14	82	-17	65	-21	47	-26	30																					— 12
— 11	-13	83	-16	67	-19	50	-24	34	-31	18																			— 11
— 10	-12	84	-15	69	-18	53	-22	38	-27	23																			— 10
— 9	-11	85	-13	71	-16	56	-20	42	-24	27	-32	13																	— 9
— 8	-10	86	-12	72	-15	59	-18	45	-22	31	-28	18																	— 8
— 7	- 9	87	-11	74	-13	61	-16	48	-20	35	-25	23																	— 7
— 6	- 8	88	-10	75	-12	63	-14	51	-18	39	-22	27	-28	15															— 6
— 5	- 7	88	- 8	77	-11	65	-13	54	-16	42	-20	31	-25	20															— 5
— 4	- 6	89	- 7	78	- 9	67	-12	56	-14	45	-17	35	-22	24	-28	14													— 4
— 3	- 5	89	- 6	79	- 8	69	-10	58	-12	48	-15	38	-19	28	-24	18	-32	9											— 3
— 2	- 3	90	- 5	80	- 7	70	- 9	60	-11	50	-13	41	-17	32	-21	22	-27	13											— 2
— 1	- 2	90	- 4	81	- 5	72	- 7	62	- 9	53	-12	44	-15	35	-18	26	-23	18	-30	9									— 1
0	- 1	91	- 3	82	- 4	73	- 6	64	- 8	55	-10	47	-13	38	-16	30	-20	22	-25	13									0
1	0	91	- 2	83	- 3	74	- 5	66	- 6	57	- 9	49	-11	41	-14	33	-17	25	-21	17	-28	10						+	1
2	1	92	0	84	- 2	75	- 4	67	- 5	59	- 7	52	- 9	44	-12	36	-14	29	-18	21	-23	14	-31	7					2
3	2	92	1	84	- 1	76	- 2	69	- 4	61	- 6	54	- 8	46	-10	39	-12	32	-15	25	-19	18	-25	11					3
4	3	92	2	85	0	77	- 1	70	- 2	63	- 4	56	- 6	49	- 8	42	-10	35	-13	28	-16	21	-21	15	-27	8			4
5	4	93	3	85	2	78	0	71	- 1	64	- 3	57	- 4	51	- 6	44	- 8	38	-11	31	-14	25	-17	18	-22	12	-30	6	5
6	5	93	4	86	3	79	1	72	0	66	- 1	59	- 3	53	- 5	46	- 7	40	- 9	34	-11	28	-14	22	-18	16	-24	10	6
7	6	93	5	86	4	80	3	73	1	67	0	61	- 2	55	- 3	48	- 5	42	- 7	36	- 9	31	-12	25	-15	19	-19	13	7
8	7	94	6	87	5	81	4	74	2	68	1	62	0	56	- 2	50	- 3	45	- 5	39	- 7	33	-10	28	-12	22	-16	17	8
9	8	94	7	87	6	81	5	75	4	70	2	64	1	58	0	52	- 2	47	- 4	41	- 5	36	- 8	30	-10	25	-13	20	9
10	9	94	8	88	7	82	6	76	5	71	4	65	2	59	1	54	0	49	- 2	43	- 4	38	- 6	33	- 8	28	-10	23	10
11	10	94	9	88	8	83	7	77	6	72	5	66	4	61	3	56	1	50	0	45	- 2	40	- 4	35	- 6	30	- 8	26	11
12	11	94	10	89	9	83	8	78	7	73	6	67	5	62	4	57	2	52	1	47	0	42	- 2	38	- 4	33	- 6	28	12
13	12	95	11	89	10	84	9	79	8	74	7	68	6	63	5	59	4	54	2	49	1	44	- 1	40	- 2	35	- 4	31	13
14	13	95	12	89	11	84	10	79	9	74	8	69	7	64	6	60	5	55	4	51	2	46	1	42	- 1	37	- 2	33	14
15	14	95	13	90	12	85	12	80	11	75	10	70	9	66	8	61	6	56	5	52	4	48	3	43	1	39	0	35	15
16	15	95	14	90	13	85	13	80	12	76	11	71	10	67	9	62	8	58	6	53	5	49	4	45	3	41	1	37	16
17	16	95	15	90	15	86	14	81	13	76	12	72	11	68	10	63	9	59	8	55	7	51	5	46	4	43	3	39	17
18	17	95	16	90	16	86	15	81	14	77	13	73	12	69	11	64	10	60	9	56	8	52	7	48	6	45	4	41	18
19	18	96	18	91	17	86	16	82	15	78	14	74	13	69	12	65	11	61	10	57	9	53	8	50	7	46	6	42	19
20	19	96	19	91	18	87	17	82	16	78	15	74	14	70	13	66	12	62	12	58	10	54	9	51	8	47	7	43	20
21	20	96	20	91	19	87	18	83	17	79	16	75	16	71	15	67	14	63	13	59	12	56	11	52	10	49	9	45	21
22	21	96	21	92	20	87	19	83	18	79	17	75	17	72	16	68	15	64	14	60	13	57	12	53	11	50	10	46	22
23	22	96	22	92	21	87	20	84	19	80	19	76	18	72	17	68	16	65	15	61	14	58	13	54	12	51	11	47	23
24	23	96	23	92	22	88	21	84	20	80	20	76	19	73	18	69	17	66	16	62	15	59	14	55	14	52	13	49	24
25	24	96	24	92	23	88	22	84	21	81	21	77	20	73	19	70	18	66	18	63	17	60	16	56	15	53	14	50	25
26	25	96	25	92	24	88	23	85	22	81	22	77	21	74	20	71	19	67	19	64	18	60	17	57	16	54	15	51	26
27	26	96	26	92	25	88	24	85	23	81	23	78	22	74	21	71	21	68	20	64	19	61	18	58	17	55	16	52	27
28	27	96	27	93	26	89	25	85	25	82	24	78	23	75	22	72	22	68	21	65	20	62	19	59	18	56	18	53	28
29	28	96	28	93	27	89	26	86	26	82	25	79	24	76	23	72	23	69	22	66	21	63	20	60	20	57	19	54	29
30	29	96	29	93	28	89	27	86	27	82	26	79	25	76	25	73	24	70	23	67	22	64	22	61	21	58	20	55	30
31	30	96	30	93	29	89	28	86	28	83	27	79	26	76	26	73	25	70	24	67	23	64	23	61	22	58	21	56	31
32	31	96	31	93	30	90	29	86	29	83	28	80	27	77	27	74	26	71	25	68	25	65	24	62	23	59	22	57	32
33	32	96	32	93	31	90	30	86	30	83	29	80	28	77	28	74	27	71	26	68	26	65	25	63	24	60	23	57	33
34	33	97	33	93	32	90	32	87	31	84	30	81	30	78	29	75	28	72	28	69	27	66	26	63	25	61	25	58	34
35	34	97	34	93	33	90	33	87	32	84	31	81	31	78	30	75	29	72	29	69	28	67	27	64	26	61	26	59	35

XXIII.—DEW-POINT AND RELATIVE HUMIDITY. FRENCH.

Depression of wet bulb ($t - t'$).

t C.	7		7.5		8		8.5		9		9.5		10		10.5		11		11.5		12		12.5		13		t C.
	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	d.p.	r.h.	
+ 5	−30	6																									+ 5
6	−24	10																									6
7	−19	13	−25	8																							7
8	−16	17	−21	12	−27	6																					8
9	−13	20	−17	15	−22	10	−29	5																			9
10	−10	23	−13	18	−17	13	−23	8	−32	4																	10
11	− 8	26	−11	21	−14	16	−18	12	−24	7																	11
12	− 6	28	− 8	24	−11	19	−14	15	−19	10	−25	6															12
13	− 4	31	− 6	26	− 8	22	−11	18	−15	13	−19	9	−26	5													13
14	− 2	33	− 4	28	− 6	24	− 9	20	−12	16	−15	12	−20	8	−27	4											14
15	0	35	− 2	31	− 4	27	− 6	23	− 9	19	−12	15	−15	11	−20	7	−28	4									15
16	1	37	0	33	− 2	29	− 4	25	− 6	22	− 9	18	−12	14	−16	10	−21	7	−29	3							16
17	3	39	1	35	0	31	− 2	27	− 4	24	− 6	20	− 9	16	−12	13	−16	9	−21	6	−30	3					17
18	4	41	3	37	1	33	0	29	− 2	26	− 4	22	− 6	19	− 9	15	−12	12	−16	9	−21	6	−31	2			18
19	6	42	4	38	3	35	2	31	0	28	− 2	24	− 4	21	− 6	18	− 9	15	−12	11	−16	8	−21	5	−31	2	19
20	7	43	6	40	5	37	3	33	2	30	0	26	− 2	23	− 4	20	− 6	17	− 9	14	−12	11	−16	8	−21	5	20
21	9	45	7	42	6	38	5	35	4	32	2	28	0	25	− 2	22	− 4	19	− 6	16	− 9	13	−12	10	−16	7	21
22	10	46	9	43	8	40	6	36	5	33	4	30	2	27	1	24	− 1	21	− 3	18	− 6	15	− 8	13	−11	10	22
23	11	47	10	44	9	41	8	38	7	35	5	32	4	29	2	26	1	23	− 1	20	− 3	17	− 5	15	− 8	12	23
24	13	49	12	46	10	42	9	39	8	36	7	34	6	31	4	28	3	25	1	22	− 1	19	− 3	17	− 5	14	24
25	14	50	13	47	12	44	11	41	10	38	8	35	7	32	6	29	4	26	3	24	1	21	− 1	19	− 3	16	25
26	15	51	14	48	13	45	12	42	11	39	10	37	9	34	8	31	6	28	5	26	3	23	2	21	0	18	26
27	16	52	15	49	14	46	13	43	12	40	11	38	10	35	9	32	8	30	7	28	5	25	4	23	2	20	27
28	18	53	17	50	16	47	15	45	14	42	13	39	12	37	11	34	9	31	8	29	7	26	5	24	4	22	28
29	19	54	18	51	17	48	16	46	15	43	14	40	13	38	12	35	11	33	10	31	9	28	7	25	6	23	29
30	20	55	19	52	18	49	17	47	16	44	16	41	14	39	13	36	12	34	11	32	10	29	9	27	8	25	30
31	21	56	20	53	19	50	19	48	18	45	17	42	16	40	15	38	14	35	13	33	12	31	10	28	9	26	31
32	22	57	21	54	21	51	20	49	19	46	18	44	17	41	16	39	15	36	14	34	13	32	12	30	11	27	32
33	23	57	23	55	22	52	21	49	20	47	19	45	18	42	18	40	17	37	16	35	15	33	14	31	12	28	33
34	25	58	24	55	23	53	22	50	21	48	21	46	20	43	19	41	18	39	17	36	16	34	15	32	14	30	34
35	26	59	25	56	24	54	23	51	23	49	22	46	21	44	20	42	19	40	18	37	17	35	16	33	15	31	35

	13		13.5		14		14.5		15		15.5		16		16.5		17		17.5		18		18.5		19		
20	−21	5	−32	2																							20
21	−16	7	−21	5	−32	2																					21
22	−11	10	−16	7	−21	4	−31	2																			22
23	− 8	12	−11	9	−15	7	−21	4	−31	2																	23
24	− 5	14	− 8	11	−11	9	−15	7	−21	4	−31	2															24
25	− 3	16	− 5	14	− 7	11	−11	9	−15	6	−20	4	−30	2													25
26	0	18	− 2	16	− 4	13	− 7	11	−10	8	−14	6	−20	4	−29	2											26
27	2	20	0	17	− 2	15	− 4	13	− 7	10	−10	8	−14	6	−19	4	−28	2									27
28	4	22	2	19	1	17	− 1	15	− 4	12	− 6	10	− 9	8	−13	6	−18	4	−27	2							28
29	6	23	4	21	3	19	1	16	− 1	14	− 3	12	− 6	10	− 9	8	−13	6	−18	4	−25	2					29
30	8	25	6	22	5	20	3	18	1	16	− 1	14	− 3	12	− 5	10	− 8	8	−12	6	−17	4	−24	2			30
31	9	26	8	24	7	22	5	20	3	18	2	16	0	14	− 2	12	− 5	10	− 8	8	−11	6	−16	4	−23	2	31
32	11	27	10	26	8	23	7	21	5	19	4	17	2	15	0	13	− 2	11	− 4	9	− 7	8	−10	6	−15	4	32
33	12	28	11	27	10	25	9	23	7	21	6	19	4	17	3	15	1	13	− 1	11	− 4	9	− 6	8	−10	6	33
34	14	30	13	28	12	26	10	24	9	22	8	20	6	18	5	16	3	14	1	13	− 1	11	− 3	9	− 6	8	34
35	15	31	14	29	13	27	12	25	11	23	10	21	8	20	7	18	5	16	4	14	2	12	0	11	− 2	9	35

XXIV TO XXX.—WIND TABLES.

TABLE XXIV.

LAMBERT'S FORMULA FOR THE DETERMINATION OF MEAN WIND DIRECTION.

INTRODUCTION.

Lambert's formula for the 8 principal wind directions is as follows:

$$\text{Tan. } A = \frac{\text{E.} - \text{W.} + (\text{N.E.} - \text{S.W.}) \cos. 45° + (\text{S.E.} - \text{N.W.}) \cos. 45°}{\text{N.} - \text{S.} + (\text{N.E.} - \text{S.W.}) \cos. 45° - (\text{S.E.} - \text{N.W.}) \cos. 45°}$$

in which N., N. E., etc., represent the number of times the wind has blown in each octant during the period under consideration. We assume that the wind velocity is the same from all points. If directions from 16 points are observed, half of each extra point should be added to the direction preceding and following; for example, with N. N. E. 6, N. E. 5, E. N. E. 3, E. 2, E. S. E. 4, we would enter the formula with N. E. 9.5, E. 5.5, etc. The result will be almost identical with that from the full formula of 16 points.

The table is in two parts: part I gives the product of any number with cos. 45° (.7071), and part II the value of the angle or its complement, in degrees. For the computations, the following form should be used:

a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	part II angle
E	W	N	S	NE	SW	SE	NW	e-f	g-h	i cos. 45	k cos. 45	a-b	l+m	c-d	l-m	o+n	p+q	$\frac{r}{s}$
2	12	20	26	13	9	0	10	4	-10	2.8	-7.1	-10	-4.3	-5	9.9	-14.3	4.9	19° N. 71 W.

The signs of $\frac{r}{s}$ give the quadrant,

$$\frac{+}{+} = \text{N. E.}; \quad \frac{-}{-} = \text{S. W.}; \quad \frac{-}{+} = \text{N. W.}; \quad \frac{+}{-} = \text{S. E.}$$

If the fraction $\frac{r}{s}$ or $\frac{s}{r}$ is not less than $\frac{168}{200}$, divide both numerator and denominator by any number till the values of r and s are found within part II. Always enter part II with the smaller number as the horizontal argument. *If s be smaller than r, take the complement of the angle, as found in the table.*

In the use of this table it will be found that the larger the figures, provided they are under $\frac{1}{100}$, the easier the computation. For example, suppose $\frac{r}{s} = \frac{-18}{14}$. In the table there is no 18 opposite 14, but if we multiply the fraction by 5 we have $\frac{90}{70}$, and the corresponding angle from part II is 38°, or taking the complement, since s is less than r, we have N. 52° W. The same result is attained if we multiply by 10.

TABLE XXIV.—LAMBERT'S FORMULA.

(Original.)

PART I.

Multiples of Cos. 45°.

Tens.	0	1	2	3	4	5	6	7	8	9	Tens.
0	0.0	0.7	1.4	2.1	2.8	3.5	4.2	4.9	5.7	6.4	0
10	7.1	7.8	8.5	9.2	9.9	10.6	11.3	12.0	12.7	13.4	10
20	14.1	14.8	15.6	16.3	17.0	17.7	18.4	19.1	19.8	20.5	20
30	21.2	21.9	22.6	23.3	24.0	24.7	25.5	26.2	26.9	27.6	30
40	28.3	29.0	29.7	30.4	31.1	31.8	32.5	33.2	33.9	34.6	40
50	35.4	36.1	36.8	37.5	38.2	38.9	39.6	40.3	41.0	41.7	50
60	42.4	43.1	43.8	44.5	45.3	46.0	46.7	47.4	48.1	48.8	60
70	49.5	50.2	50.9	51.6	52.3	53.0	53.7	54.4	55.2	55.9	70
80	56.6	57.3	58.0	58.7	59.4	60.1	60.8	61.5	62.2	62.9	80
90	63.6	64.3	65.1	65.8	66.5	67.2	67.9	68.6	69.3	70.0	90
100	70.7	71.4	72.1	72.8	73.5	74.2	75.0	75.7	76.4	77.1	100
110	77.8	78.5	79.2	79.9	80.6	81.3	82.0	82.7	83.4	84.1	110
120	84.9	85.6	86.3	87.0	87.7	88.4	89.1	89.8	90.5	91.2	120
130	91.9	92.6	93.3	94.0	94.8	95.5	96.2	96.9	97.6	98.3	130
140	99.0	99.7	100.4	101.1	101.8	102.5	103.2	103.9	104.7	105.4	140
150	106.1	106.8	107.5	108.2	108.9	109.6	110.3	111.0	111.7	112.4	150
160	113.1	113.8	114.6	115.3	116.0	116.7	117.4	118.1	118.8	119.5	160
170	120.2	120.9	121.6	122.3	123.0	123.7	124.5	125.2	125.9	126.6	170
180	127.3	128.0	128.7	129.4	130.1	130.8	131.5	132.2	132.9	133.6	180
190	134.4	135.1	135.8	136.5	137.2	137.9	138.6	139.3	140.0	140.7	190
200	141.4	142.1	142.8	143.5	144.2	145.0	145.7	146.4	147.1	147.8	200

XXIV.—LAMBERT'S FORMULA.

(Original.)

Values of A.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
10	6	11	17	22	27	31	35	39	42	45	36	39	41	43	45	37	40	42	44	45	40	41	43	44	45	41	42	43	43	44	45	45	45	45	45	45	45	44	45	45	45	45	45	45	45	45	45	45	45	45	**10**
15	4	8	11	15	18	22	25	28	31	34	29	31	33	35	37	34	36	38	40	42	39	41	42	44	45	40	42	43	44	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	**15**
20	3	6	9	11	14	17	19	22	24	27	24	26	27	29	31	32	34	36	37	39	37	39	40	42	43	39	41	42	43	44	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	**20**
25	2	5	7	9	11	13	16	18	20	22	20	22	23	25	27	28	30	32	34	36	34	36	38	39	41	38	40	42	43	44	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	**25**
30	2	4	6	8	9	11	13	15	16	18	17	19	20	22	23	25	26	28	30	31	32	33	35	37	38	36	38	39	41	42	43	44	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	**30**
35	2	3	5	7	8	10	11	13	14	16	15	16	18	19	21	22	24	25	27	28	30	31	32	34	35	33	35	36	38	39	40	41	42	43	44	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	**35**
40	1	3	4	6	7	9	10	11	13	14	13	15	16	17	19	20	21	23	24	25	27	28	29	31	32	30	32	33	35	36	37	38	39	40	41	42	43	44	45	45	45	45	45	45	45	45	45	45	45	45	**40**
45	1	2	3	4	5	6	7	8	9	10	12	13	14	15	17	18	19	20	22	23	24	26	27	28	30	27	29	30	31	33	34	35	36	37	38	39	40	41	42	43	44	45	45	45	45	45	45	45	45	45	**45**
50	1	2	3	5	6	7	8	9	10	11	12	13	15	16	17	18	20	21	22	24	25	27	28	30	31	28	30	31	33	34	35	36	37	39	40	41	42	43	44	45	45	45	45	45	45	45	45	45	45	45	**50**
55	1	2	3	4	5	6	7	8	9	10	11	12	13	15	16	17	18	20	21	22	24	25	27	28	29	27	29	30	32	33	34	35	36	38	39	40	41	42	43	44	45	45	45	45	45	45	45	45	45	45	**55**
60	1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	17	18	19	21	22	23	25	26	28	29	26	28	29	31	32	33	34	36	37	38	39	40	41	42	43	44	45	45	45	45	45	45	45	45	45	**60**
65	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18	19	20	22	23	24	26	27	28	25	27	28	30	31	32	33	34	36	37	38	39	40	41	42	43	44	45	45	45	45	45	45	45	45	**65**
70	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19	20	21	23	24	25	27	28	25	26	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	45	45	45	45	45	**70**
75	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	**75**
80	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	**80**
85	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	**85**
90	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	**90**
95	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	**95**
100	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**100**
105	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**105**
110	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**110**
115	0	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**115**
120	0	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**120**
125	0	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**125**
130	0	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**130**
135	0	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**135**
140	0	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**140**
145	0	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	**145**
150	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**150**
155	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**155**
160	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**160**
165	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**165**
170	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**170**
175	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**175**
180	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**180**
185	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**185**
190	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**190**
195	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**195**
200	0	1	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	**200**
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	

XXIV.—LAMBERT'S FORMULA.

XXIV.—LAMBERT'S FORMULA.

Values of A.

	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	00	02	04	06	08	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	
55	42	43	44																																																					
60	40	41	42	43	44	45																																																		
65	38	39	40	41	42	43	44	45																																																	
70	36	37	38	39	40	41	42	43	44	45																																														
75	34	35	36	37	38	39	40	40	41	42	43	44	45																																											
80	32	33	34	35	36	37	38	39	39	40	41	42	43	44	45																																								
85	30	31	32	33	34	35	36	37	38	39	39	40	41	42	43	44	45																																						
90	29	30	31	32	33	34	35	36	37	38	39	39	40	41	42	43	44	45																																					
95	28	29	30	31	32	33	34	35	36	36	37	38	39	40	41	41	42	43	44	45																																				
100	27	27	28	29	30	31	32	33	33	34	35	36	37	37	38	39	40	41	41	42	43	43	44	44	45																														
105	25	26	27	28	29	30	31	31	32	33	34	35	36	36	37	38	39	40	40	41	42	43	43	44	44	45																												
110	24	25	26	27	28	29	30	30	31	32	33	34	35	35	36	37	38	39	39	40	41	42	42	43	43	44	45																											
115	23	24	25	26	27	28	29	29	30	31	32	33	34	34	35	36	37	38	38	39	40	41	41	42	42	43	44	45																										
120	23	23	24	25	26	27	28	28	29	30	31	32	33	33	34	35	36	37	37	38	39	40	40	41	41	42	43	44	45																									
125	22	23	23	24	25	26	27	27	28	29	30	31	32	32	33	34	35	36	36	37	38	39	39	40	40	41	42	43	43	44	45																							
130	21	22	23	23	24	25	26	26	27	28	29	30	31	31	32	33	34	35	35	36	37	38	38	39	39	40	41	42	42	43	44	45																						
135	20	21	22	23	23	24	25	25	26	27	28	29	30	30	31	32	33	34	34	35	36	37	37	38	38	39	40	41	41	42	43	44	45																						
140	20	20	21	22	23	23	24	24	25	26	27	28	29	29	30	31	32	33	33	34	35	36	36	37	37	38	39	40	40	41	42	43	44	45																						
145	19	20	20	21	22	22	23	24	24	25	26	27	28	28	29	30	31	32	32	33	34	35	35	36	36	37	38	39	39	40	41	42	43	44	45																						
150	18	19	20	20	21	22	22	23	24	24	25	26	26	27	27	28	29	30	30	31	32	32	33	33	34	35	35	36	36	37	38	38	39	39	40	40	41	42	42	43	43	44	44	45	45												
155	18	19	19	20	20	21	22	22	23	24	24	25	25	26	26	27	28	28	29	29	30	31	31	32	32	33	34	34	35	35	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44	45									
160	17	18	19	19	20	21	21	22	22	23	24	24	25	25	26	27	27	28	28	29	30	30	31	31	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	45							
165	17	17	18	19	19	20	21	21	22	22	23	24	24	25	25	26	27	27	28	28	29	30	30	31	31	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	44	45							
170	16	17	18	18	19	20	20	21	21	22	23	23	24	24	25	26	26	27	27	28	29	29	30	30	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	44	45						
175	16	17	17	18	18	19	20	20	21	21	22	22	23	23	24	24	25	26	26	27	27	28	28	29	29	30	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	42	43						
180	16	16	17	17	18	18	19	20	20	21	21	22	22	23	23	24	25	25	26	26	27	27	28	28	29	29	30	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	42	43					
185	15	16	16	17	17	18	19	19	20	20	21	21	22	22	23	24	24	25	25	26	26	27	27	28	28	29	29	30	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	42	43				
190	15	15	16	16	17	18	18	19	19	20	20	21	21	22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	30	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	42	43		
195	14	15	15	16	16	17	18	18	19	19	20	20	21	21	22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	30	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	41	42	43		
200	14	15	15	16	16	17	17	18	18	19	19	20	20	21	21	22	22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	30	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	40	41	42	43	
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	00	02	04	06	08	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	

TABLE XXV.—CONVERSION OF WIND VELOCITIES.

(Original.)

1 mile per hour = .4470+ metre per second.
= 1.46667 foot " "
= 1.6093+ kilometre per hour.

Miles.	m.	ft.	kil.	Miles.	m.	ft.	kil.	Miles.	m.	ft.	kil.
0	.0	.0	.0	26.0	11.6	38.1	41.8	52.0	23.2	76.3	83.7
.5	.2	.7	.8	26.5	11.8	38.9	42.6	52.5	23.5	77.0	84.5
1.0	.4	1.5	1.6	27.0	12.1	39.6	43.5	53.0	23.7	77.7	85.3
1.5	.7	2.2	2.4	27.5	12.3	40.3	44.3	53.5	23.9	78.5	86.1
2.0	.9	2.9	3.2	28.0	12.5	41.1	45.1	54.0	24.1	79.2	86.9
2.5	1.1	3.7	4.0	28.5	12.7	41.8	45.9	54.5	24.4	79.9	87.7
3.0	1.3	4.4	4.8	29.0	13.0	42.5	46.7	55.0	24.6	80.7	88.5
3.5	1.6	5.1	5.6	29.5	13.2	43.3	47.5	55.5	24.8	81.4	89.3
4.0	1.8	5.9	6.4	30.0	13.4	44.0	48.3	56.0	25.0	82.1	90.1
4.5	2.0	6.6	7.2	30.5	13.6	44.7	49.1	56.5	25.3	82.9	90.9
5.0	2.2	7.3	8.0	31.0	13.9	45.5	49.9	57.0	25.5	83.6	91.7
5.5	2.5	8.1	8.9	31.5	14.1	46.2	50.7	57.5	25.7	84.3	92.5
6.0	2.7	8.8	9.7	32.0	14.3	46.9	51.5	58.0	25.9	85.1	93.3
6.5	2.9	9.5	10.5	32.5	14.5	47.7	52.3	58.5	26.2	85.8	94.1
7.0	3.1	10.3	11.3	33.0	14.8	48.4	53.1	59.0	26.4	86.5	95.0
7.5	3.4	11.0	12.1	33.5	15.0	49.1	53.9	59.5	26.6	87.3	95.8
8.0	3.6	11.7	12.9	34.0	15.2	49.9	54.7	60.0	26.8	88.0	96.6
8.5	3.8	12.5	13.7	34.5	15.4	50.6	55.5	60.5	27.0	88.7	97.4
9.0	4.0	13.2	14.5	35.0	15.6	51.3	56.3	61.0	27.3	89.5	98.2
9.5	4.2	13.9	15.3	35.5	15.9	52.1	57.1	61.5	27.5	90.2	99.0
10.0	4.5	14.7	16.1	36.0	16.1	52.8	57.9	62.0	27.7	90.9	99.8
10.5	4.7	15.4	16.9	36.5	16.3	53.5	58.7	62.5	27.9	91.7	100.6
11.0	4.9	16.1	17.7	37.0	16.5	54.3	59.5	63.0	28.2	92.4	101.4
11.5	5.1	16.9	18.5	37.5	16.8	55.0	60.4	63.5	28.4	93.1	102.2
12.0	5.4	17.6	19.3	38.0	17.0	55.7	61.2	64.0	28.6	93.9	103.0
12.5	5.6	18.3	20.1	38.5	17.2	56.5	62.0	64.5	28.8	94.6	103.8
13.0	5.8	19.1	20.9	39.0	17.4	57.2	62.8	65.0	29.1	95.3	104.6
13.5	6.0	19.8	21.7	39.5	17.7	57.9	63.6	65.5	29.3	96.1	105.4
14.0	6.3	20.5	22.5	40.0	17.9	58.7	64.4	66.0	29.5	96.8	106.2
14.5	6.5	21.3	23.3	40.5	18.1	59.4	65.2	66.5	29.7	97.5	107.0
15.0	6.7	22.0	24.1	41.0	18.3	60.1	66.0	67.0	30.0	98.3	107.8
15.5	6.9	22.7	24.9	41.5	18.6	60.9	66.8	67.5	30.2	99.0	108.6
16.0	7.2	23.5	25.7	42.0	18.8	61.6	67.6	68.0	30.4	99.7	109.4
16.5	7.4	24.2	26.6	42.5	19.0	62.3	68.4	68.5	30.6	100.5	110.2
17.0	7.6	24.9	27.4	43.0	19.2	63.1	69.2	69.0	30.8	101.2	111.0
17.5	7.8	25.7	28.2	43.5	19.4	63.8	70.0	69.5	31.1	101.9	111.8
18.0	8.0	26.4	29.0	44.0	19.7	64.5	70.8	70.0	31.3	102.7	112.7
18.5	8.3	27.1	29.8	44.5	19.9	65.3	71.6	70.5	31.5	103.4	113.5
19.0	8.5	27.9	30.6	45.0	20.1	66.0	72.4	71.0	31.7	104.1	114.3
19.5	8.7	28.6	31.4	45.5	20.3	66.7	73.2	71.5	32.0	104.9	115.1
20.0	8.9	29.3	32.2	46.0	20.6	67.5	74.0	72.0	32.2	105.6	115.9
20.5	9.2	30.1	33.0	46.5	20.8	68.2	74.8	72.5	32.4	106.3	116.7
21.0	9.4	30.8	33.8	47.0	21.0	68.9	75.6	73.0	32.6	107.1	117.5
21.5	9.6	31.5	34.6	47.5	21.2	69.7	76.4	73.5	32.9	107.8	118.3
22.0	9.8	32.3	35.4	48.0	21.5	70.4	77.2	74.0	33.1	108.5	119.1
22.5	10.1	33.0	36.2	48.5	21.7	71.1	78.1	74.5	33.3	109.3	119.9
23.0	10.3	33.7	37.0	49.0	21.9	71.9	78.9	75.0	33.5	110.0	120.7
23.5	10.5	34.5	37.8	49.5	22.1	72.6	79.7	75.5	33.8	110.7	121.5
24.0	10.7	35.2	38.6	50.0	22.4	73.3	80.5	76.0	34.0	111.5	122.3
24.5	11.0	35.9	39.4	50.5	22.6	74.1	81.3	76.5	34.2	112.2	123.1
25.0	11.2	36.7	40.2	51.0	22.8	74.8	82.1	77.0	34.4	112.9	123.9
25.5	11.4	37.4	41.0	51.5	23.0	75.5	82.9	77.5	34.6	113.7	124.7
26.0	11.6	38.1	41.8	52.0	23.2	76.3	83.7	78.0	34.9	114.4	125.5

TABLE XXVI.—CONVERSION OF WIND VELOCITIES.

(Original.)

1 metre per second = 2.236943 miles per hour.

Metres.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
0	.0	.2	.4	.7	.9	1.1	1.3	1.6	1.8	2.0
1	2.2	2.5	2.7	2.9	3.1	3.4	3.6	3.8	4.0	4.3
2	4.5	4.7	4.9	5.1	5.4	5.6	5.8	6.0	6.3	6.5
3	6.7	6.9	7.2	7.4	7.6	7.8	8.1	8.3	8.5	8.7
4	8.9	9.2	9.4	9.6	9.8	10.1	10.3	10.5	10.7	11.0
5	11.2	11.4	11.6	11.9	12.1	12.3	12.5	12.8	13.0	13.2
6	13.4	13.6	13.9	14.1	14.3	14.5	14.8	15.0	15.2	15.4
7	15.7	15.9	16.1	16.3	16.6	16.8	17.0	17.2	17.4	17.7
8	17.9	18.1	18.3	18.6	18.8	19.0	19.2	19.5	19.7	19.9
9	20.1	20.4	20.6	20.8	21.0	21.3	21.5	21.7	21.9	22.1
10	22.4	22.6	22.8	23.0	23.3	23.5	23.7	23.9	24.2	24.4
11	24.6	24.8	25.1	25.3	25.5	25.7	25.9	26.2	26.4	26.6
12	26.8	27.1	27.3	27.5	27.7	28.0	28.2	28.4	28.6	28.9
13	29.1	29.3	29.5	29.8	30.0	30.2	30.4	30.6	30.9	31.1
14	31.3	31.5	31.8	32.0	32.2	32.4	32.7	32.9	33.1	33.3
15	33.6	33.8	34.0	34.2	34.4	34.7	34.9	35.1	35.3	35.6
16	35.8	36.0	36.2	36.5	36.7	36.9	37.1	37.4	37.6	37.8
17	38.0	38.3	38.5	38.7	38.9	39.1	39.4	39.6	39.8	40.0
18	40.3	40.5	40.7	40.9	41.2	41.4	41.6	41.8	42.1	42.3
19	42.5	42.7	42.9	43.2	43.4	43.6	43.8	44.1	44.3	44.5
20	44.7	45.0	45.2	45.4	45.6	45.9	46.1	46.3	46.5	46.8
21	47.0	47.2	47.4	47.6	47.9	48.1	48.3	48.5	48.8	49.0
22	49.2	49.4	49.7	49.9	50.1	50.3	50.6	50.8	51.0	51.2
23	51.4	51.7	51.9	52.1	52.3	52.6	52.8	53.0	53.2	53.5
24	53.7	53.9	54.1	54.4	54.6	54.8	55.0	55.3	55.5	55.7
25	55.9	56.1	56.4	56.6	56.8	57.0	57.3	57.5	57.7	57.9
26	58.2	58.4	58.6	58.8	59.1	59.3	59.5	59.7	60.0	60.2
27	60.4	60.6	60.8	61.1	61.3	61.5	61.7	62.0	62.2	62.4
28	62.6	62.9	63.1	63.3	63.5	63.8	64.0	64.2	64.4	64.6
29	64.9	65.1	65.3	65.5	65.8	66.0	66.2	66.4	66.7	66.9
30	67.1	67.3	67.6	67.8	68.0	68.2	68.5	68.7	68.9	69.1
31	69.3	69.6	69.8	70.0	70.2	70.5	70.7	70.9	71.1	71.4
32	71.6	71.8	72.0	72.3	72.5	72.7	72.9	73.1	73.4	73.6
33	73.8	74.0	74.3	74.5	74.7	74.9	75.2	75.4	75.6	75.8
34	76.1	76.3	76.5	76.7	77.0	77.2	77.4	77.6	77.8	78.1
35	78.3	78.5	78.7	79.0	79.2	79.4	79.6	79.9	80.1	80.3
36	80.5	80.8	81.0	81.2	81.4	81.6	81.9	82.1	82.3	82.5
37	82.8	83.0	83.2	83.4	83.7	83.9	84.1	84.3	84.6	84.8
38	85.0	85.2	85.5	85.7	85.9	86.1	86.3	86.6	86.8	87.0
39	87.2	87.5	87.7	87.9	88.1	88.4	88.6	88.8	89.0	89.3
40	89.5	89.7	89.9	90.1	90.4	90.6	90.8	91.0	91.3	91.5
41	91.7	91.9	92.2	92.4	92.6	92.8	93.1	93.3	93.5	93.7
42	94.0	94.2	94.4	94.6	94.8	95.1	95.3	95.5	95.7	96.0
43	96.2	96.4	96.6	96.9	97.1	97.3	97.5	97.8	98.0	98.2
44	98.4	98.6	98.9	99.1	99.3	99.5	99.8			

TABLE XXVII.

CONVERSION OF WIND VELOCITY IN MILES PER HOUR TO PRESSURE IN POUNDS PER SQUARE FOOT.

INTRODUCTION.

In many investigations it is necessary to express the velocity of the wind in terms of the pressure, but the determination of this relation is difficult, and the problem has attracted the attention of physicists for a hundred years.

Of the various results, those of Rouse, quoted by Smeaton[1] seem most consistent with recent investigations[2]. The formula, as announced by Smeaton from Rouse's experiments, is:

$p = .005\ v^2\ s$, in which
p = the pressure in pounds;
v = the velocity in miles per hour;
s = the surface in square feet.

The table has been computed from this formula, s being taken as one square foot.

It will be understood that the table is strictly applicable only to surfaces of about one square foot, and for velocities from twenty to forty miles per hour.

[1] Phil. Trans., Lond., 1759, li, 165.
[2] Unwin, C. K. Encyc. Brit., 9 ed. Hydromechanics.
Hazen, H. A. Am. Journ. Sc., New Haven, 1887, xxxiv, 241.

TABLE XXVII.—MILES PER HOUR TO POUNDS PER SQUARE FOOT.

$V = \sqrt{200 \times p}$.

Miles.	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	.1	.1	.2	.2	.3	.4
10	.5	.6	.7	.8	1.0	1.1	1.3	1.4	1.6	1.8
20	2.0	2.2	2.4	2.6	2.9	3.1	3.4	3.6	3.9	4.2
30	4.5	4.8	5.1	5.4	5.8	6.1	6.5	6.8	7.2	7.6
40	8.0	8.4	8.8	9.2	9.7	10.1	10.6	11.0	11.5	12.0
50	12.5	13.0	13.5	14.0	14.6	15.1	15.7	16.2	16.8	17.4
60	18.0	18.6	19.2	19.8	20.5	21.1	21.8	22.4	23.1	23.8
70	24.5	25.2	25.9	26.6	27.4	28.1	28.9	29.6	30.4	31.2
80	32.0	32.8	33.6	34.4	35.3	36.1	37.0	37.8	38.7	39.6
90	40.5	41.4	42.3	43.2	44.2	45.1	46.1	47.0	48.0	49.0

TABLE XXVIII.—BEAUFORT SCALE INTO MILES PER HOUR.

(Scott. Element. Met. p. 159.)

Force.	Beaufort Scale.	Miles.
0	Calm	3
1	Light air	8
2	Light breeze	13
3	Gentle "	18
4	Moderate "	23
5	Fresh "	28
6	Strong "	34
7	Moderate gale	40
8	Fresh "	48
9	Strong "	56
10	Whole "	65
11	Storm	75
12	Hurricane	90

TABLE XXIX.—ESTIMATION OF WIND VELOCITY.

(Original. Adopted by Signal Service.)

0. Calm.
1. Light; just moving the leaves of trees.
2. Moderate; moving branches.
3. Brisk; swaying branches, blowing up dust.
4. High; blowing up twigs from the ground, swaying whole trees.
5. Gale; breaking small branches, loosening bricks on chimneys.
6. Hurricane or tornado; destroying everything in its path.

TABLE XXX.—ESTIMATION OF THUNDER-STORM INTENSITY.

(Original. Adopted by Signal Service.)

1. Distant lightning.
2. Distant thunder.
3. Moderate thunder-storm.
4. Heavy thunder-storm.
5. Heavy thunder with very high wind breaking small branches off trees, etc.
6. Thunder with hurricane or tornado.

XXXI–XXXVI. LINEAR MEASURE TABLES.

TABLE XXXI.—INCHES TO MILLIMETRES.

1 inch = 25.3999 mm.

(Original.)

In.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	0	.25	.51	.76	1.02	1.27	1.52	1.78	2.03	2.29
0.1	2.54	2.79	3.05	3.30	3.56	3.81	4.06	4.32	4.57	4.83
0.2	5.08	5.33	5.59	5.84	6.10	6.35	6.60	6.86	7.11	7.37
0.3	7.62	7.87	8.13	8.38	8.64	8.89	9.14	9.40	9.65	9.91
0.4	10.16	10.41	10.67	10.92	11.18	11.43	11.68	11.94	12.19	12.45
0.5	12.70	12.95	13.21	13.46	13.72	13.97	14.22	14.48	14.73	14.99
0.6	15.24	15.49	15.75	16.00	16.26	16.51	16.76	17.02	17.27	17.53
0.7	17.78	18.03	18.29	18.54	18.80	19.05	19.30	19.56	19.81	20.07
0.8	20.32	20.57	20.83	21.08	21.34	21.59	21.84	22.10	22.35	22.61
0.9	22.86	23.11	23.37	23.62	23.88	24.13	24.38	24.64	24.89	25.15
1.0	25.40	25.65	25.91	26.16	26.42	26.67	26.92	27.18	27.43	27.69
1.1	27.94	28.19	28.45	28.70	28.96	29.21	29.46	29.72	29.97	30.23
1.2	30.48	30.73	30.99	31.24	31.50	31.75	32.00	32.26	32.51	32.77
1.3	33.02	33.27	33.53	33.78	34.04	34.29	34.54	34.80	35.05	35.31
1.4	35.56	35.81	36.07	36.32	36.58	36.83	37.08	37.34	37.59	37.85
1.5	38.10	38.35	38.61	38.86	39.12	39.37	39.62	39.88	40.13	40.39
1.6	40.64	40.89	41.15	41.40	41.66	41.91	42.16	42.42	42.67	42.93
1.7	43.18	43.43	43.69	43.94	44.20	44.45	44.70	44.96	45.21	45.47
1.8	45.72	45.97	46.23	46.48	46.74	46.99	47.24	47.50	47.75	48.01
1.9	48.26	48.51	48.77	49.02	49.28	49.53	49.78	50.04	50.29	50.55
2.0	50.80	51.05	51.31	51.56	51.82	52.07	52.32	52.58	52.83	53.09
2.1	53.34	53.59	53.85	54.10	54.36	54.61	54.86	55.12	55.37	55.63
2.2	55.88	56.13	56.39	56.64	56.90	57.15	57.40	57.66	57.91	58.17
2.3	58.42	58.67	58.93	59.18	59.44	59.69	59.94	60.20	60.45	60.71
2.4	60.96	61.21	61.47	61.72	61.98	62.23	62.48	62.74	62.99	63.25
2.5	63.50	63.75	64.01	64.26	64.52	64.77	65.02	65.28	65.53	65.79
2.6	66.04	66.29	66.55	66.80	67.06	67.31	67.56	67.82	68.07	68.33
2.7	68.58	68.83	69.09	69.34	69.60	69.85	70.10	70.36	70.61	70.87
2.8	71.12	71.37	71.63	71.88	72.14	72.39	72.64	72.90	73.15	73.41
2.9	73.66	73.91	74.17	74.42	74.68	74.93	75.18	75.44	75.69	75.95
3.0	76.20	76.45	76.71	76.96	77.22	77.47	77.72	77.98	78.23	78.49
3.1	78.74	78.99	79.25	79.50	79.76	80.01	80.26	80.52	80.77	81.03
3.2	81.28	81.53	81.79	82.04	82.30	82.55	82.80	83.06	83.31	83.57
3.3	83.82	84.07	84.33	84.58	84.84	85.09	85.34	85.60	85.85	86.11
3.4	86.36	86.61	86.87	87.12	87.38	87.63	87.88	88.14	88.39	88.65
3.5	88.90	89.15	89.41	89.66	89.92	90.17	90.42	90.68	90.93	91.19
3.6	91.44	91.69	91.95	92.20	92.46	92.71	92.96	93.22	93.47	93.73
3.7	93.98	94.23	94.49	94.74	95.00	95.25	95.50	95.76	96.01	96.27
3.8	96.52	96.77	97.03	97.28	97.54	97.79	98.04	98.30	98.55	98.81
3.9	99.06	99.31	99.57	99.82	100.08	100.33	100.58	100.84	101.09	101.35
4.0	101.60	101.85	102.11	102.36	102.62	102.87	103.12	103.38	103.63	103.89
4.1	104.14	104.39	104.65	104.90	105.16	105.41	105.66	105.92	106.17	106.43
4.2	106.68	106.93	107.19	107.44	107.70	107.95	108.20	108.46	108.71	108.97
4.3	109.22	109.47	109.73	109.98	110.24	110.49	110.74	111.00	111.25	111.51
4.4	111.76	112.01	112.27	112.52	112.78	113.03	113.28	113.54	113.79	114.05
4.5	114.30	114.55	114.81	115.06	115.32	115.57	115.82	116.08	116.33	116.59
4.6	116.84	117.09	117.35	117.60	117.86	118.11	118.36	118.62	118.87	119.13
4.7	119.38	119.63	119.89	120.14	120.40	120.65	120.90	121.16	121.41	121.67
4.8	121.92	122.17	122.43	122.68	122.94	123.19	123.44	123.70	123.95	124.21
4.9	124.46	124.71	124.97	125.22	125.48	125.73	125.98	126.24	126.49	126.75
5.0	127.00	127.25	127.51	127.76	128.02	128.27	128.52	128.78	129.03	129.29

XXXI.—INCHES TO MILLIMETRES.

In.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
5.0	127.00	127.25	127.51	127.76	128.02	128.27	128.52	128.78	129.03	129.29
5.1	129.54	129.79	130.05	130.30	130.56	130.81	131.06	131.32	131.57	131.83
5.2	132.08	132.33	132.59	132.84	133.10	133.35	133.60	133.86	134.11	134.37
5.3	134.62	134.87	135.13	135.38	135.64	135.89	136.14	136.40	136.65	136.91
5.4	137.16	137.41	137.67	137.92	138.18	138.43	138.68	138.94	139.19	139.45
5.5	139.70	139.95	140.21	140.46	140.72	140.97	141.22	141.48	141.73	141.99
5.6	142.24	142.49	142.75	143.00	143.26	143.51	143.76	144.02	144.27	144.53
5.7	144.78	145.03	145.29	145.54	145.80	146.05	146.30	146.56	146.81	147.07
5.8	147.32	147.57	147.83	148.08	148.34	148.59	148.84	149.10	149.35	149.61
5.9	149.86	150.11	150.37	150.62	150.88	151.13	151.38	151.64	151.89	152.15
6.0	152.40	152.65	152.91	153.16	153.42	153.67	153.92	154.18	154.43	154.69
6.1	154.94	155.19	155.45	155.70	155.96	156.21	156.46	156.72	156.97	157.23
6.2	157.48	157.73	157.99	158.24	158.50	158.75	159.00	159.26	159.51	159.77
6.3	160.02	160.27	160.53	160.78	161.04	161.29	161.54	161.80	162.05	162.31
6.4	162.56	162.81	163.07	163.32	163.58	163.83	164.08	164.34	164.59	164.85
6.5	165.10	165.35	165.61	165.86	166.12	166.37	166.62	166.88	167.13	167.39
6.6	167.64	167.89	168.15	168.40	168.66	168.91	169.16	169.42	169.67	169.93
6.7	170.18	170.43	170.69	170.94	171.20	171.45	171.70	171.96	172.21	172.47
6.8	172.72	172.97	173.23	173.48	173.74	173.99	174.24	174.50	174.75	175.01
6.9	175.26	175.51	175.77	176.02	176.28	176.53	176.78	177.04	177.29	177.55
7.0	177.80	178.05	178.31	178.56	178.82	179.07	179.32	179.58	179.83	180.09
7.1	180.34	180.59	180.85	181.10	181.36	181.61	181.86	182.12	182.37	182.63
7.2	182.88	183.13	183.39	183.64	183.90	184.15	184.40	184.66	184.91	185.17
7.3	185.42	185.67	185.93	186.18	186.44	186.69	186.94	187.20	187.45	187.71
7.4	187.96	188.21	188.47	188.72	188.98	189.23	189.48	189.74	189.99	190.25
7.5	190.50	190.75	191.01	191.26	191.52	191.77	192.02	192.28	192.53	192.79
7.6	193.04	193.29	193.55	193.80	194.06	194.31	194.56	194.82	195.07	195.33
7.7	195.58	195.83	196.09	196.34	196.60	196.85	197.10	197.36	197.61	197.87
7.8	198.12	198.37	198.63	198.88	199.14	199.39	199.64	199.90	200.15	200.41
7.9	200.66	200.91	201.17	201.42	201.68	201.93	202.18	202.44	202.69	202.95
8.0	203.20	203.45	203.71	203.96	204.22	204.47	204.72	204.98	205.23	205.49
8.1	205.74	205.99	206.25	206.50	206.76	207.01	207.26	207.52	207.77	208.03
8.2	208.28	208.53	208.79	209.04	209.30	209.55	209.80	210.06	210.31	210.57
8.3	210.82	211.07	211.33	211.58	211.84	212.09	212.34	212.60	212.85	213.11
8.4	213.36	213.61	213.87	214.12	214.38	214.63	214.88	215.14	215.39	215.65
8.5	215.90	216.15	216.41	216.66	216.92	217.17	217.42	217.68	217.93	218.19
8.6	218.44	218.69	218.95	219.20	219.46	219.71	219.96	220.22	220.47	220.73
8.7	220.98	221.23	221.49	221.74	222.00	222.25	222.50	222.76	223.01	223.27
8.8	223.52	223.77	224.03	224.28	224.54	224.79	225.04	225.30	225.55	225.81
8.9	226.06	226.31	226.57	226.82	227.08	227.33	227.58	227.84	228.09	228.35
9.0	228.60	228.85	229.11	229.36	229.62	229.87	230.12	230.38	230.63	230.89
9.1	231.14	231.39	231.65	231.90	232.16	232.41	232.66	232.92	233.17	233.43
9.2	233.68	233.93	234.19	234.44	234.70	234.95	235.20	235.46	235.71	235.97
9.3	236.22	236.47	236.73	236.98	237.24	237.49	237.74	238.00	238.25	238.51
9.4	238.76	239.01	239.27	239.52	239.78	240.03	240.28	240.54	240.79	241.05
9.5	241.30	241.55	241.81	242.06	242.32	242.57	242.82	243.08	243.33	243.59
9.6	243.84	244.09	244.35	244.60	244.86	245.11	245.36	245.62	245.87	246.13
9.7	246.38	246.63	246.89	247.14	247.40	247.65	247.90	248.16	248.41	248.67
9.8	248.92	249.17	249.43	249.68	249.94	250.19	250.44	250.70	250.95	251.21
9.9	251.46	251.71	251.97	252.22	252.48	252.73	252.98	253.24	253.49	253.75
10.0	254.00	254.25	254.51	254.76	255.01	255.27	255.52	255.78	256.03	256.28

XXXI.—INCHES TO MILLIMETRES.

In.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
10.0	254.00	254.25	254.51	254.76	255.01	255.27	255.52	255.78	256.03	256.28
10.1	256.54	256.79	257.05	257.30	257.55	257.81	258.06	258.32	258.57	258.82
10.2	259.08	259.33	259.59	259.84	260.09	260.35	260.60	260.86	261.11	261.36
10.3	261.62	261.87	262.13	262.38	262.63	262.89	263.14	263.40	263.65	263.90
10.4	264.16	264.41	264.67	264.92	265.17	265.43	265.68	265.94	266.19	266.44
10.5	266.70	266.95	267.21	267.46	267.71	267.97	268.22	268.48	268.73	268.98
10.6	269.24	269.49	269.75	270.00	270.25	270.51	270.76	271.02	271.27	271.52
10.7	271.78	272.03	272.29	272.54	272.79	273.05	273.30	273.56	273.81	274.06
10.8	274.32	274.57	274.83	275.08	275.33	275.59	275.84	276.10	276.35	276.60
10.9	276.86	277.11	277.37	277.62	277.87	278.13	278.38	278.64	278.89	279.14
11.0	279.40	279.65	279.91	280.16	280.41	280.67	280.92	281.18	281.43	281.68
11.1	281.94	282.19	282.45	282.70	282.95	283.21	283.46	283.72	283.97	284.22
11.2	284.48	284.73	284.99	285.24	285.49	285.75	286.00	286.26	286.51	286.76
11.3	287.02	287.27	287.53	287.78	288.03	288.29	288.54	288.80	289.05	289.30
11.4	289.56	289.81	290.07	290.32	290.57	290.83	291.08	291.34	291.59	291.84
11.5	292.10	292.35	292.61	292.86	293.11	293.37	293.62	293.88	294.13	294.38
11.6	294.64	294.89	295.15	295.40	295.65	295.91	296.16	296.42	296.67	296.92
11.7	297.18	297.43	297.69	297.94	298.19	298.45	298.70	298.96	299.21	299.46
11.8	299.72	299.97	300.23	300.48	300.73	300.99	301.24	301.50	301.75	302.00
11.9	302.26	302.51	302.77	303.02	303.27	303.53	303.78	304.04	304.29	304.54
12.0	304.80	305.05	305.31	305.56	305.81	306.07	306.32	306.58	306.83	307.08
12.1	307.34	307.59	307.85	308.10	308.35	308.61	308.86	309.12	309.37	309.62
12.2	309.88	310.13	310.39	310.64	310.89	311.15	311.40	311.66	311.91	312.16
12.3	312.42	312.67	312.93	313.18	313.43	313.69	313.94	314.20	314.45	314.70
12.4	314.96	315.21	315.47	315.72	315.97	316.23	316.48	316.74	316.99	317.24
12.5	317.50	317.75	318.01	318.26	318.51	318.77	319.02	319.28	319.53	319.78
12.6	320.04	320.29	320.55	320.80	321.05	321.31	321.56	321.82	322.07	322.32
12.7	322.58	322.83	323.09	323.34	323.59	323.85	324.10	324.36	324.61	324.86
12.8	325.12	325.37	325.63	325.88	326.13	326.39	326.64	326.90	327.15	327.40
12.9	327.66	327.91	328.17	328.42	328.67	328.93	329.18	329.44	329.69	329.94
13.0	330.20	330.45	330.71	330.96	331.21	331.47	331.72	331.98	332.23	332.48
13.1	332.74	332.99	333.25	333.50	333.75	334.01	334.26	334.52	334.77	335.02
13.2	335.28	335.53	335.79	336.04	336.29	336.55	336.80	337.06	337.31	337.56
13.3	337.82	338.07	338.33	338.58	338.83	339.09	339.34	339.60	339.85	340.10
13.4	340.36	340.61	340.87	341.12	341.37	341.63	341.88	342.14	342.39	342.64
13.5	342.90	343.15	343.41	343.66	343.91	344.17	344.42	344.68	344.93	345.18
13.6	345.44	345.69	345.95	346.20	346.45	346.71	346.96	347.22	347.47	347.72
13.7	347.98	348.23	348.49	348.74	348.99	349.25	349.50	349.76	350.01	350.26
13.8	350.52	350.77	351.03	351.28	351.53	351.79	352.04	352.30	352.55	352.80
13.9	353.06	353.31	353.57	353.82	354.07	354.33	354.58	354.84	355.09	355.34
14.0	355.60	355.85	356.11	356.36	356.61	356.87	357.12	357.38	357.63	357.88
14.1	358.14	358.39	358.65	358.90	359.15	359.41	359.66	359.92	360.17	360.42
14.2	360.68	360.93	361.19	361.44	361.69	361.95	362.20	362.46	362.71	362.96
14.3	363.22	363.47	363.73	363.98	364.23	364.49	364.74	365.00	365.25	365.50
14.4	365.76	366.01	366.27	366.52	366.77	367.03	367.28	367.54	367.79	368.04
14.5	368.30	368.55	368.81	369.06	369.31	369.57	369.82	370.08	370.33	370.58
14.6	370.84	371.09	371.35	371.60	371.85	372.11	372.36	372.62	372.87	373.12
14.7	373.38	373.63	373.89	374.14	374.39	374.65	374.90	375.16	375.41	375.66
14.8	375.92	376.17	376.43	376.68	376.93	377.19	377.44	377.70	377.95	378.20
14.9	378.46	378.71	378.97	379.22	379.47	379.73	379.98	380.24	380.49	380.74
15.0	381.00	381.25	381.51	381.76	382.01	382.27	382.52	382.78	383.03	383.28

XXXI.—INCHES TO MILLIMETRES.

In.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
15.0	381.00	381.25	381.51	381.76	382.01	382.27	382.52	382.78	383.03	383.28
15.1	383.54	383.79	384.05	384.30	384.55	384.81	385.06	385.32	385.57	385.82
15.2	386.08	386.33	386.59	386.84	387.09	387.35	387.60	387.86	388.11	388.36
15.3	388.62	388.87	389.13	389.38	389.63	389.89	390.14	390.40	390.65	390.90
15.4	391.16	391.41	391.67	391.92	392.17	392.43	392.68	392.94	393.19	393.44
15.5	393.70	393.95	394.21	394.46	394.71	394.97	395.22	395.48	395.73	395.98
15.6	396.24	396.49	396.75	397.00	397.25	397.51	397.76	398.02	398.27	398.52
15.7	398.78	399.03	399.29	399.54	399.79	400.05	400.30	400.56	400.81	401.06
15.8	401.32	401.57	401.83	402.08	402.33	402.59	402.84	403.10	403.35	403.60
15.9	403.86	404.11	404.37	404.62	404.87	405.13	405.38	405.64	405.89	406.14
16.0	406.40	406.65	406.91	407.16	407.41	407.67	407.92	408.18	408.43	408.68
16.1	408.94	409.19	409.45	409.70	409.95	410.21	410.46	410.72	410.97	411.22
16.2	411.48	411.73	411.99	412.24	412.49	412.75	413.00	413.26	413.51	413.76
16.3	414.02	414.27	414.53	414.78	415.03	415.29	415.54	415.80	416.05	416.30
16.4	416.56	416.81	417.07	417.32	417.57	417.83	418.08	418.34	418.59	418.84
16.5	419.10	419.35	419.61	419.86	420.11	420.37	420.62	420.88	421.13	421.38
16.6	421.64	421.89	422.15	422.40	422.65	422.91	423.16	423.42	423.67	423.92
16.7	424.18	424.43	424.69	424.94	425.19	425.45	425.70	425.96	426.21	426.46
16.8	426.72	426.97	427.23	427.48	427.73	427.99	428.24	428.50	428.75	429.00
16.9	429.26	429.51	429.77	430.02	430.27	430.53	430.78	431.04	431.29	431.54
17.0	431.80	432.05	432.31	432.56	432.81	433.07	433.32	433.58	433.83	434.08
17.1	434.34	434.59	434.85	435.10	435.35	435.61	435.86	436.12	436.37	436.62
17.2	436.88	437.13	437.39	437.64	437.89	438.15	438.40	438.66	438.91	439.16
17.3	439.42	439.67	439.93	440.18	440.43	440.69	440.94	441.20	441.45	441.70
17.4	441.96	442.21	442.47	442.72	442.97	443.23	443.48	443.74	443.99	444.24
17.5	444.50	444.75	445.01	445.26	445.51	445.77	446.02	446.28	446.53	446.78
17.6	447.04	447.29	447.55	447.80	448.05	448.31	448.56	448.82	449.07	449.32
17.7	449.58	449.83	450.09	450.34	450.59	450.85	451.10	451.36	451.61	451.86
17.8	452.12	452.37	452.63	452.88	453.13	453.39	453.64	453.90	454.15	454.40
17.9	454.66	454.91	455.17	455.42	455.67	455.93	456.18	456.44	456.69	456.94
18.0	457.20	457.45	457.71	457.96	458.21	458.47	458.72	458.98	459.23	459.48
18.1	459.74	459.99	460.25	460.50	460.75	461.01	461.26	461.52	461.77	462.02
18.2	462.28	462.53	462.79	463.04	463.29	463.55	463.80	464.06	464.31	464.56
18.3	464.82	465.07	465.33	465.58	465.83	466.09	466.34	466.60	466.85	467.10
18.4	467.36	467.61	467.87	468.12	468.37	468.63	468.88	469.14	469.39	469.64
18.5	469.90	470.15	470.41	470.66	470.91	471.17	471.42	471.68	471.93	472.18
18.6	472.44	472.69	472.95	473.20	473.45	473.71	473.96	474.22	474.47	474.72
18.7	474.98	475.23	475.49	475.74	475.99	476.25	476.50	476.76	477.01	477.26
18.8	477.52	477.77	478.03	478.28	478.53	478.79	479.04	479.30	479.55	479.80
18.9	480.06	480.31	480.57	480.82	481.07	481.33	481.58	481.84	482.09	482.34
19.0	482.60	482.85	483.11	483.36	483.61	483.87	484.12	484.38	484.63	484.88
19.1	485.14	485.39	485.65	485.90	486.15	486.41	486.66	486.92	487.17	487.42
19.2	487.68	487.93	488.19	488.44	488.69	488.95	489.20	489.46	489.71	489.96
19.3	490.22	490.47	490.73	490.98	491.23	491.49	491.74	492.00	492.25	492.50
19.4	492.76	493.01	493.27	493.52	493.77	494.03	494.28	494.54	494.79	495.04
19.5	495.30	495.55	495.81	496.06	496.31	496.57	496.82	497.08	497.33	497.58
19.6	497.84	498.09	498.35	498.60	498.85	499.11	499.36	499.62	499.87	500.12
19.7	500.38	500.63	500.89	501.14	501.39	501.65	501.90	502.16	502.41	502.66
19.8	502.92	503.17	503.43	503.68	503.93	504.19	504.44	504.70	504.95	505.20
19.9	505.46	505.71	505.97	506.22	506.47	506.73	506.98	507.24	507.49	507.74
20.0	508.00	508.25	508.51	508.76	509.01	509.27	509.52	509.78	510.03	510.28

XXXI.—INCHES TO MILLIMETRES.

In.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
20.0	508.00	508.25	508.51	508.76	509.01	509.27	509.52	509.78	510.03	510.28
20.1	510.54	510.79	511.05	511.30	511.55	511.81	512.06	512.32	512.57	512.82
20.2	513.08	513.33	513.59	513.84	514.09	514.35	514.60	514.86	515.11	515.36
20.3	515.62	515.87	516.13	516.38	516.63	516.89	517.14	517.40	517.65	517.90
20.4	518.16	518.41	518.67	518.92	519.17	519.43	519.68	519.94	520.19	520.44
20.5	520.70	520.95	521.21	521.46	521.71	521.97	522.22	522.48	522.73	522.98
20.6	523.24	523.49	523.75	524.00	524.25	524.51	524.76	525.02	525.27	525.52
20.7	525.78	526.03	526.29	526.54	526.79	527.05	527.30	527.56	527.81	528.06
20.8	528.32	528.57	528.83	529.08	529.33	529.59	529.84	530.10	530.35	530.60
20.9	530.86	531.11	531.37	531.62	531.87	532.13	532.38	532.64	532.89	533.14
21.0	533.40	533.65	533.91	534.16	534.41	534.67	534.92	535.18	535.43	535.68
21.1	535.94	536.19	536.45	536.70	536.95	537.21	537.46	537.72	537.97	538.22
21.2	538.48	538.73	538.99	539.24	539.49	539.75	540.00	540.26	540.51	540.76
21.3	541.02	541.27	541.53	541.78	542.03	542.29	542.54	542.80	543.05	543.30
21.4	543.56	543.81	544.07	544.32	544.57	544.83	545.08	545.34	545.59	545.84
21.5	546.10	546.35	546.61	546.86	547.11	547.37	547.62	547.88	548.13	548.38
21.6	548.64	548.89	549.15	549.40	549.65	549.91	550.16	550.42	550.67	550.92
21.7	551.18	551.43	551.69	551.94	552.19	552.45	552.70	552.96	553.21	553.46
21.8	553.72	553.97	554.23	554.48	554.73	554.99	555.24	555.50	555.75	556.00
21.9	556.26	556.51	556.77	557.02	557.27	557.53	557.78	558.04	558.29	558.54
22.0	558.80	559.05	559.31	559.56	559.81	560.07	560.32	560.58	560.83	561.08
22.1	561.34	561.59	561.85	562.10	562.35	562.61	562.86	563.12	563.37	563.62
22.2	563.88	564.13	564.39	564.64	564.89	565.15	565.40	565.66	565.91	566.16
22.3	566.42	566.67	566.93	567.18	567.43	567.69	567.94	568.20	568.45	568.70
22.4	568.96	569.21	569.47	569.72	569.97	570.23	570.48	570.74	570.99	571.24
22.5	571.50	571.75	572.01	572.26	572.51	572.77	573.02	573.28	573.53	573.78
22.6	574.04	574.29	574.55	574.80	575.05	575.31	575.56	575.82	576.07	576.32
22.7	576.58	576.83	577.09	577.34	577.59	577.85	578.10	578.36	578.61	578.86
22.8	579.12	579.37	579.63	579.88	580.13	580.39	580.64	580.90	581.15	581.40
22.9	581.66	581.91	582.17	582.42	582.67	582.93	583.18	583.44	583.69	583.94
23.0	584.20	584.45	584.71	584.96	585.21	585.47	585.72	585.98	586.23	586.48
23.1	586.74	586.99	587.25	587.50	587.75	588.01	588.26	588.52	588.77	589.02
23.2	589.28	589.53	589.79	590.04	590.29	590.55	590.80	591.06	591.31	591.56
23.3	591.82	592.07	592.33	592.58	592.83	593.09	593.34	593.60	593.85	594.10
23.4	594.36	594.61	594.87	595.12	595.37	595.63	595.88	596.14	596.39	596.64
23.5	596.90	597.15	597.41	597.66	597.91	598.17	598.42	598.68	598.93	599.18
23.6	599.44	599.69	599.95	600.20	600.45	600.71	600.96	601.22	601.47	601.72
23.7	601.98	602.23	602.49	602.74	602.99	603.25	603.50	603.76	604.01	604.26
23.8	604.52	604.77	605.03	605.28	605.53	605.79	606.04	606.30	606.55	606.80
23.9	607.06	607.31	607.57	607.82	608.07	608.33	608.58	608.84	609.09	609.34
24.0	609.60	609.85	610.11	610.36	610.61	610.87	611.12	611.38	611.63	611.88
24.1	612.14	612.39	612.65	612.90	613.15	613.41	613.66	613.92	614.17	614.42
24.2	614.68	614.93	615.19	615.44	615.69	615.95	616.20	616.46	616.71	616.96
24.3	617.22	617.47	617.73	617.98	618.23	618.49	618.74	619.00	619.25	619.50
24.4	619.76	620.01	620.27	620.52	620.77	621.03	621.28	621.54	621.79	622.04
24.5	622.30	622.55	622.81	623.06	623.31	623.57	623.82	624.08	624.33	624.58
24.6	624.84	625.09	625.35	625.60	625.85	626.11	626.36	626.62	626.87	627.12
24.7	627.38	627.63	627.89	628.14	628.39	628.65	628.90	629.16	629.41	629.66
24.8	629.92	630.17	630.43	630.68	630.93	631.19	631.44	631.70	631.95	632.20
24.9	632.46	632.71	632.97	633.22	633.47	633.73	633.98	634.24	634.49	634.74
25.0	635.00	635.25	635.51	635.76	636.01	636.27	636.52	636.78	637.03	637.28

XXXI.—INCHES TO MILLIMETRES.

In.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
25.0	635.00	635.25	635.51	635.76	636.01	636.27	636.52	636.78	637.03	637.28
25.1	637.54	637.79	638.05	638.30	638.55	638.81	639.06	639.32	639.57	639.82
25.2	640.08	640.33	640.59	640.84	641.09	641.35	641.60	641.86	642.11	642.36
25.3	642.62	642.87	643.13	643.38	643.63	643.89	644.14	644.40	644.65	644.90
25.4	645.16	645.41	645.67	645.92	646.17	646.43	646.68	646.94	647.19	647.44
25.5	647.70	647.95	648.21	648.46	648.71	648.97	649.22	649.48	649.73	649.98
25.6	650.24	650.49	650.75	651.00	651.25	651.51	651.76	652.02	652.27	652.52
25.7	652.78	653.03	653.29	653.54	653.79	654.05	654.30	654.56	654.81	655.06
25.8	655.32	655.57	655.83	656.08	656.33	656.59	656.84	657.10	657.35	657.60
25.9	657.86	658.11	658.37	658.62	658.87	659.13	659.38	659.64	659.89	660.14
26.0	660.40	660.65	660.91	661.16	661.41	661.67	661.92	662.18	662.43	662.68
26.1	662.94	663.19	663.45	663.70	663.95	664.21	664.46	664.72	664.97	665.22
26.2	665.48	665.73	665.99	666.24	666.49	666.75	667.00	667.26	667.51	667.76
26.3	668.02	668.27	668.53	668.78	669.03	669.29	669.54	669.80	670.05	670.30
26.4	670.56	670.81	671.07	671.32	671.57	671.83	672.08	672.34	672.59	672.84
26.5	673.10	673.35	673.61	673.86	674.11	674.37	674.62	674.88	675.13	675.38
26.6	675.64	675.89	676.15	676.40	676.65	676.91	677.16	677.42	677.67	677.92
26.7	678.18	678.43	678.69	678.94	679.19	679.45	679.70	679.96	680.21	680.46
26.8	680.72	680.97	681.23	681.48	681.73	681.99	682.24	682.50	682.75	683.00
26.9	683.26	683.51	683.77	684.02	684.27	684.53	684.78	685.04	685.29	685.54
27.0	685.80	686.05	686.31	686.56	686.81	687.07	687.32	687.58	687.83	688.08
27.1	688.34	688.59	688.85	689.10	689.35	689.61	689.86	690.12	690.37	690.62
27.2	690.88	691.13	691.39	691.64	691.89	692.15	692.40	692.66	692.91	693.16
27.3	693.42	693.67	693.93	694.18	694.43	694.69	694.94	695.20	695.45	695.70
27.4	695.96	696.21	696.47	696.72	696.97	697.23	697.48	697.74	697.99	698.24
27.5	698.50	698.75	699.01	699.26	699.51	699.77	700.02	700.28	700.53	700.78
27.6	701.04	701.29	701.55	701.80	702.05	702.31	702.56	702.82	703.07	703.32
27.7	703.58	703.83	704.09	704.34	704.59	704.85	705.10	705.36	705.61	705.86
27.8	706.12	706.37	706.63	706.88	707.13	707.39	707.64	707.90	708.15	708.40
27.9	708.66	708.91	709.17	709.42	709.67	709.93	710.18	710.44	710.69	710.94
28.0	711.20	711.45	711.71	711.96	712.21	712.47	712.72	712.98	713.23	713.48
28.1	713.74	713.99	714.25	714.50	714.75	715.01	715.26	715.52	715.77	716.02
28.2	716.28	716.53	716.79	717.04	717.29	717.55	717.80	718.06	718.31	718.56
28.3	718.82	719.07	719.33	719.58	719.83	720.09	720.34	720.60	720.85	721.10
28.4	721.36	721.61	721.87	722.12	722.37	722.63	722.88	723.14	723.39	723.64
28.5	723.90	724.15	724.41	724.66	724.91	725.17	725.42	725.68	725.93	726.18
28.6	726.44	726.69	726.95	727.20	727.45	727.71	727.96	728.22	728.47	728.72
28.7	728.98	729.23	729.49	729.74	729.99	730.25	730.50	730.76	731.01	731.26
28.8	731.52	731.77	732.03	732.28	732.53	732.79	733.04	733.30	733.55	733.80
28.9	734.06	734.31	734.57	734.82	735.07	735.33	735.58	735.84	736.09	736.34
29.0	736.60	736.85	737.11	737.36	737.61	737.87	738.12	738.38	738.63	738.88
29.1	739.14	739.39	739.65	739.90	740.15	740.41	740.66	740.92	741.17	741.42
29.2	741.68	741.93	742.19	742.44	742.69	742.95	743.20	743.46	743.71	743.96
29.3	744.22	744.47	744.73	744.98	745.23	745.49	745.74	746.00	746.25	746.50
29.4	746.76	747.01	747.27	747.52	747.77	748.03	748.28	748.54	748.79	749.04
29.5	749.30	749.55	749.81	750.06	750.31	750.57	750.82	751.08	751.33	751.58
29.6	751.84	752.09	752.35	752.60	752.85	753.11	753.36	753.62	753.87	754.12
29.7	754.38	754.63	754.89	755.14	755.39	755.65	755.90	756.16	756.41	756.66
29.8	756.92	757.17	757.43	757.68	757.93	758.19	758.44	758.70	758.95	759.20
29.9	759.46	759.71	759.97	760.22	760.47	760.73	760.98	761.24	761.49	761.74
30.0	762.00	762.25	762.50	762.76	763.01	763.27	763.52	763.77	764.03	764.28

XXXI.—INCHES TO MILLIMETRES.

In.	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
30.0	762.00	762.25	762.50	762.76	763.01	763.27	763.52	763.77	764.03	764.28
30.1	764.54	764.79	765.04	765.30	765.55	765.81	766.06	766.31	766.57	766.82
30.2	767.08	767.33	767.58	767.84	768.09	768.35	768.60	768.85	769.11	769.36
30.3	769.62	769.87	770.12	770.38	770.63	770.89	771.14	771.39	771.65	771.90
30.4	772.16	772.41	772.66	772.92	773.17	773.43	773.68	773.93	774.19	774.44
30.5	774.70	774.95	775.20	775.46	775.71	775.97	776.22	776.47	776.73	776.98
30.6	777.24	777.49	777.74	778.00	778.25	778.51	778.76	779.01	779.27	779.52
30.7	779.78	780.03	780.28	780.54	780.79	781.05	781.30	781.55	781.81	782.06
30.8	782.32	782.57	782.82	783.08	783.33	783.59	783.84	784.09	784.35	784.60
30.9	784.86	785.11	785.36	785.62	785.87	786.13	786.38	786.63	786.89	787.14
31.0	787.40	787.65	787.90	788.16	788.41	788.67	788.92	789.17	789.43	789.68
31.1	789.94	790.19	790.44	790.70	790.95	791.21	791.46	791.71	791.97	792.22
31.2	792.48	792.73	792.98	793.24	793.49	793.75	794.00	794.25	794.51	794.76
31.3	795.02	795.27	795.52	795.78	796.03	796.29	796.54	796.79	797.05	797.30
31.4	797.56	797.81	798.06	798.32	798.57	798.83	799.08	799.33	799.59	799.84
31.5	800.10	800.35	800.60	800.86	801.11	801.37	801.62	801.87	802.13	802.38
31.6	802.64	802.89	803.14	803.40	803.65	803.91	804.16	804.41	804.67	804.92
31.7	805.18	805.43	805.68	805.94	806.19	806.45	806.70	806.95	807.21	807.46
31.8	807.72	807.97	808.22	808.48	808.73	808.99	809.24	809.49	809.75	810.00
31.9	810.26	810.51	810.76	811.02	811.27	811.53	811.78	812.03	812.29	812.54

LINEAR MEASURES.

TABLE XXXII.

MILLIMETRES TO INCHES.

TABLE XXXII.—MILLIMETRES TO INCHES.

1 mm. = 0.393702 inch.

(Original.)

mm.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
400	15.748	15.752	15.756	15.760	15.764	15.768	15.772	15.776	15.780	15.784
401	15.787	.791	.795	.799	.803	.807	.811	.815	.819	.823
402	15.827	.831	.835	.839	.843	.847	.850	.854	.858	.862
403	15.866	.870	.874	.878	.882	.886	.890	.894	.898	.902
404	15.906	.909	.913	.917	.921	.925	.929	.933	.937	.941
405	15.945	15.949	15.953	15.957	15.961	15.965	15.969	15.972	15.976	15.980
406	15.984	15.988	15.992	15.996	16.000	16.004	16.008	16.012	16.016	16.020
407	16.024	16.028	16.032	16.035	.039	.043	.047	.051	.055	.059
408	16.063	.067	.071	.075	.079	.083	.087	.091	.095	.098
409	16.102	.106	.110	.114	.118	.122	.126	.130	.134	.138
410	16.142	16.146	16.150	16.154	16.158	16.161	16.165	16.169	16.173	16.177
411	16.181	.185	.189	.193	.197	.201	.205	.209	.213	.217
412	16.221	.224	.228	.232	.236	.240	.244	.248	.252	.256
413	16.260	.264	.268	.272	.276	.280	.284	.287	.291	.295
414	16.299	.303	.307	.311	.315	.319	.323	.327	.331	.335
415	16.339	16.343	16.347	16.350	16.354	16.358	16.362	16.366	16.370	16.374
416	16.378	.382	.386	.390	.394	.398	.402	.406	.409	.413
417	16.417	.421	.425	.429	.433	.437	.441	.445	.449	.453
418	16.457	.461	.465	.469	.472	.476	.480	.484	.488	.492
419	16.496	.500	.504	.508	.512	.516	.520	.524	.528	.532
420	16.535	16.539	16.543	16.547	16.551	16.555	16.559	16.563	16.567	16.571
421	16.575	.579	.583	.587	.591	.595	.598	.602	.606	.610
422	16.614	.618	.622	.626	.630	.634	.638	.642	.646	.650
423	16.654	.658	.661	.665	.669	.673	.677	.681	.685	.689
424	16.693	.697	.701	.705	.709	.713	.717	.721	.724	.728
425	16.732	16.736	16.740	16.744	16.748	16.752	16.756	16.760	16.764	16.768
426	16.772	.776	.780	.784	.787	.791	.795	.799	.803	.807
427	16.811	.815	.819	.823	.827	.831	.835	.839	.843	.847
428	16.850	.854	.858	.862	.866	.870	.874	.878	.882	.886
429	16.890	.894	.898	.902	.906	.910	.913	.917	.921	.925
430	16.929	16.933	16.937	16.941	16.945	16.949	16.953	16.957	16.961	16.965
431	16.969	16.972	16.976	16.980	16.984	16.988	16.992	16.996	17.000	17.004
432	17.008	17.012	17.016	17.020	17.024	17.028	17.032	17.035	.039	.043
433	17.047	.051	.055	.059	.063	.067	.071	.075	.079	.083
434	17.087	.091	.095	.098	.102	.106	.110	.114	.118	.122
435	17.126	17.130	17.134	17.138	17.142	17.146	17.150	17.154	17.158	17.161
436	17.165	.169	.173	.177	.181	.185	.189	.193	.197	.201
437	17.205	.209	.213	.217	.221	.224	.228	.232	.236	.240
438	17.244	.248	.252	.256	.260	.264	.268	.272	.276	.280
439	17.284	.287	.291	.295	.299	.303	.307	.311	.315	.319
440	17.323	17.327	17.331	17.335	17.339	17.343	17.347	17.350	17.354	17.358
441	17.362	.366	.370	.374	.378	.382	.386	.390	.394	.398
442	17.402	.406	.410	.413	.417	.421	.425	.429	.433	.437
443	17.441	.445	.449	.453	.457	.461	.465	.469	.472	.476
444	17.480	.484	.488	.492	.496	.500	.504	.508	.512	.516
445	17.520	17.524	17.528	17.532	17.535	17.539	17.543	17.547	17.551	17.555
446	17.559	.563	.567	.571	.575	.579	.583	.587	.591	.595
447	17.598	.602	.606	.610	.614	.618	.622	.626	.630	.634
448	17.638	.642	.646	.650	.654	.658	.661	.665	.669	.673
449	17.677	.681	.685	.689	.693	.697	.701	.705	.709	.713
450	17.717	.721	.724	.728	.732	.736	.740	.744	.748	.752

XXXII.—MILLIMETRES TO INCHES.

mm.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
450	17.717	17.721	17.724	17.728	17.732	17.736	17.740	17.744	17.748	17.752
451	17.756	.760	.764	.768	.772	.776	.780	.784	.787	.791
452	17.795	.799	.803	.807	.811	.815	.819	.823	.827	.831
453	17.835	.839	.843	.847	.850	.854	.858	.862	.866	.870
454	17.874	.878	.882	.886	.890	.894	.898	.902	.906	.910
455	17.913	17.917	17.921	17.925	17.929	17.933	17.937	17.941	17.945	17.949
456	17.953	.957	.961	.965	.969	.972	.976	.980	.984	.988
457	17.992	.996	18.000	18.004	18.008	18.012	18.016	18.020	18.024	18.028
458	18.032	18.035	.039	.043	.047	.051	.055	.059	.063	.067
459	18.071	.075	.079	.083	.087	.091	.095	.098	.102	.106
460	18.110	18.114	18.118	18.122	18.126	18.130	18.134	18.138	18.142	18.146
461	18.150	.154	.158	.161	.165	.169	.173	.177	.181	.185
462	18.189	.193	.197	.201	.205	.209	.213	.217	.221	.224
463	18.228	.232	.236	.240	.244	.248	.252	.256	.260	.264
464	18.268	.272	.276	.280	.284	.287	.291	.295	.299	.303
465	18.307	18.311	18.315	18.319	18.323	18.327	18.331	18.335	18.339	18.343
466	18.347	.350	.354	.358	.362	.366	.370	.374	.378	.382
467	18.386	.390	.394	.398	.402	.406	.410	.413	.417	.421
468	18.425	.429	.433	.437	.441	.445	.449	.453	.457	.461
469	18.465	.469	.472	.476	.480	.484	.488	.492	.496	.500
470	18.504	18.508	18.512	18.516	18.520	18.524	18.528	18.532	18.535	18.539
471	18.543	.547	.551	.555	.559	.563	.567	.571	.575	.579
472	18.583	.587	.591	.595	.598	.602	.606	.610	.614	.618
473	18.622	.626	.630	.634	.638	.642	.646	.650	.654	.658
474	18.661	.665	.669	.673	.677	.681	.685	.689	.693	.697
475	18.701	18.705	18.709	18.713	18.717	18.721	18.724	18.728	18.732	18.736
476	18.740	.744	.748	.752	.756	.760	.764	.768	.772	.776
477	18.780	.784	.787	.791	.795	.799	.803	.807	.811	.815
478	18.819	.823	.827	.831	.835	.839	:843	.847	.850	.854
479	18.858	.862	.866	.870	.874	.878	.882	.886	.890	.894
480	18.898	18.902	18.906	18.910	18.913	18.917	18.921	18.925	18.929	18.933
481	18.937	.941	.945	.949	.953	.957	.961	.965	.969	.972
482	18.976	.980	.984	.988	.992	.996	19.000	19.004	19.008	19.012
483	19.016	19.020	19.024	19.028	19.032	19.035	.039	.043	.047	.051
484	19.055	.059	.063	.067	.071	.075	.079	.083	.087	.091
485	19.095	19.098	19.102	19.106	19.110	19.114	19.118	19.122	19.126	19.130
486	19.134	.138	.142	.146	.150	.154	.158	.161	.165	.169
487	19.173	.177	.181	.185	.189	.193	.197	.201	.205	.209
488	19.213	.217	.221	.224	.228	.232	.236	.240	.244	.248
489	19.252	.256	.260	.264	.268	.272	.276	.280	.284	.287
490	19.291	19.295	19.299	19.303	19.307	19.311	19.315	19.319	19.323	19.327
491	19.331	.335	.339	.343	.347	.350	.354	.358	.362	.366
492	19.370	.374	.378	.382	.386	.390	.394	.398	.402	.406
493	19.410	.413	.417	.421	.425	.429	.433	.437	.441	.445
494	19.449	.453	.457	.461	.465	.469	.473	.476	.480	.484
495	19.488	19.492	19.496	19.500	19.504	19.508	19.512	19.516	19.520	19.524
496	19.528	.532	.535	.539	.543	.547	.551	.555	.559	.563
497	19.567	.571	.575	.579	.583	.587	.591	.595	.598	.602
498	19.606	.610	.614	.618	.622	.626	.630	.634	.638	.642
499	19.646	.650	.654	.658	.661	.665	.669	.673	.677	.681
500	19.685	.689	.693	.697	.701	.705	.709	.713	.717	.721

XXXII.—MILLIMETRES TO INCHES.

mm.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
500	19.685	19.689	19.693	19.697	19.701	19.705	19.709	19.713	19.717	19.721
501	19.724	.728	.732	.736	.740	.744	.748	.752	.756	.760
502	19.764	.768	.772	.776	.780	.784	.787	.791	.795	.799
503	19.803	.807	.811	.815	.819	.823	.827	.831	.835	.839
504	19.843	.847	.850	.854	.858	.862	.866	.870	.874	.878
505	19.882	19.886	19.890	19.894	19.898	19.902	19.906	19.910	19.913	19.917
506	19.921	.925	.929	.933	.937	.941	.945	.949	.953	.957
507	19.961	.965	.969	.973	.976	.980	.984	.988	.992	.996
508	20.000	20.004	20.008	20.012	20.016	20.020	20.024	20.028	20.032	20.035
509	20.039	.043	.047	.051	.055	.059	.063	.067	.071	.075
510	20.079	20.083	20.087	20.091	20.095	20.098	20.102	20.106	20.110	20.114
511	20.118	.122	.126	.130	.134	.138	.142	.146	.150	.154
512	20.158	.161	.165	.169	.173	.177	.181	.185	.189	.193
513	20.197	.201	.205	.209	.213	.217	.221	.224	.228	.232
514	20.236	.240	.244	.248	.252	.256	.260	.264	.268	.272
515	20.276	20.280	20.284	20.287	20.291	20.295	20.299	20.303	20.307	20.311
516	20.315	.319	.323	.327	.331	.335	.339	.343	.347	.350
517	20.354	.358	.362	.366	.370	.374	.378	.382	.386	.390
518	20.394	.398	.402	.406	.410	.413	.417	.421	.425	.429
519	20.433	.437	.441	.445	.449	.453	.457	.461	.465	.469
520	20.473	20.476	20.480	20.484	20.488	20.492	20.496	20.500	20.504	20.508
521	20.512	.516	.520	.524	.528	.532	.536	.539	.543	.547
522	20.551	.555	.559	.563	.567	.571	.575	.579	.583	.587
523	20.591	.595	.598	.602	.606	.610	.614	.618	.622	.626
524	20.630	.634	.638	.642	.646	.650	.654	.658	.661	.665
525	20.669	20.673	20.677	20.681	20.685	20.689	20.693	20.697	20.701	20.705
526	20.709	.713	.717	.721	.724	.728	.732	.736	.740	.744
527	20:748	.752	.756	.760	.764	.768	.772	.776	.780	.784
528	20.787	.791	.795	.799	.803	.807	.811	.815	.819	.823
529	20.827	.831	.835	.839	.843	.847	.850	.854	.858	.862
530	20.866	20.870	20.874	20.878	20.882	20.886	20.890	20.894	20.898	20.902
531	20.906	.910	.913	.917	.921	.925	.929	.933	.937	.941
532	20.945	.949	.953	.957	.961	.965	.969	.973	.976	.980
533	20.984	.988	.992	.996	21.000	21.004	21.008	21.012	21.016	21.020
534	21.024	21.028	21.032	21.035	.039	.043	.047	.051	.055	.059
535	21.063	21.067	21.071	21.075	21.079	21.083	21.087	21.091	21.095	21.098
536	21.102	.106	.110	.114	.118	.122	.126	.130	.134	.138
537	21.142	.146	.150	.154	.158	.161	.165	.169	.173	.177
538	21.181	.185	.189	.193	.197	.201	.205	.209	.213	.217
539	21.221	.224	.228	.232	.236	.240	.244	.248	.252	.256
540	21.260	21.264	21.268	21.272	21.276	21.280	21.284	21.287	21.291	21.295
541	21.299	.303	.307	.311	.315	.319	.323	.327	.331	.335
542	21.339	.343	.347	.350	.354	.358	.362	.366	.370	.374
543	21.378	.382	.386	.390	.394	.398	.402	.406	.410	.413
544	21.417	.421	.425	.429	.433	.437	.441	.445	.449	.453
545	21.457	21.461	21.465	21.469	21.473	21.476	21.480	21.484	21.488	21.492
546	21.496	.500	.504	.508	.512	.516	.520	.524	.528	.532
547	21.535	.539	.543	.547	.551	.555	.559	.563	.567	.571
548	21.575	.579	.583	.587	.591	.595	.598	.602	.606	.610
549	21.614	.618	.622	.626	.630	.634	.638	.642	.646	.650
550	21.654	.658	.661	.665	.669	.673	.677	.681	.685	.689

XXXII.—MILLIMETRES TO INCHES.

mm.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
550	21.654	21.658	21.661	21.665	21.669	21.673	21.677	21.681	21.685	21.689
551	21.693	.697	.701	.705	.709	.713	.717	.721	.724	.728
552	21.732	.736	.740	.744	.748	.752	.756	.760	.764	.768
553	21.772	.776	.780	.784	.787	.791	.795	.799	.803	.807
554	21.811	.815	.819	.823	.827	.831	.835	.839	.843	.847
555	21.850	21.854	21.858	21.862	21.866	21.870	21.874	21.878	21.882	21.886
556	21.890	.894	.898	.902	.906	.910	.913	.917	.921	.925
557	21.929	.933	.937	.941	.945	.949	.953	.957	.961	.965
558	21.969	.973	.976	.980	.984	.988	.992	.996	22.000	22.004
559	22.008	22.012	22.016	22.020	22.024	22.028	22.032	22.036	.039	.043
560	22.047	22.051	22.055	22.059	22.063	22.067	22.071	22.075	22.079	22.083
561	22.087	.091	.095	.098	.102	.106	.110	.114	.118	.122
562	22.126	.130	.134	.138	.142	.146	.150	.154	.158	.161
563	22.165	.169	.173	.177	.181	.185	.189	.193	.197	.201
564	22.205	.209	.213	.217	.221	.224	.228	.232	.236	.240
565	22.244	22.248	22.252	22.256	22.260	22.264	22.268	22.272	22.276	22.280
566	22.284	.287	.291	.295	.299	.303	.307	.311	.315	.319
567	22.323	.327	.331	.335	.339	.343	.347	.350	.354	.358
568	22.362	.366	.370	.374	.378	.382	.386	.390	.394	.398
569	22.402	.406	.410	.413	.417	.421	.425	.429	.433	.437
570	22.441	22.445	22.449	22.453	22.457	22.461	22.465	22.469	22.473	22.476
571	22.480	.484	.488	.492	.496	.500	.504	.508	.512	.516
572	22.520	.524	.528	.532	.536	.539	.543	.547	.551	.555
573	22.559	.563	.567	.571	.575	.579	.583	.587	.591	.595
574	22.598	.602	.606	.610	.614	.618	.622	.626	.630	.634
575	22.638	22.642	22.646	22.650	22.654	22.658	22.661	22.665	22.669	22.673
576	22.677	.681	.685	.689	.693	.697	.701	.705	.709	.713
577	22.717	.721	.724	.728	.732	.736	.740	.744	.748	.752
578	22.756	.760	.764	.768	.772	.776	.780	.784	.787	.791
579	22.795	.799	.803	.807	.811	.815	.819	.823	.827	.831
580	22.835	22.839	22.843	22.847	22.850	22.854	22.858	22.862	22.866	22.870
581	22.874	.878	.882	.886	.890	.894	.898	.902	.906	.910
582	22.913	.917	.921	.925	.929	.933	.937	.941	.945	.949
583	22.953	.957	.961	.965	.969	.973	.976	.980	.984	.988
584	22.992	.996	23.000	23.004	23.008	23.012	23.016	23.020	23.024	23.028
585	23.032	23.036	23.039	23.043	23.047	23.051	23.055	23.059	23.063	23.067
586	23.071	.075	.079	.083	.087	.091	.095	.098	.102	.106
587	23.110	.114	.118	.122	.126	.130	.134	.138	.142	.146
588	23.150	.154	.158	.161	.165	.169	.173	.177	.181	.185
589	23.189	.193	.197	.201	.205	.209	.213	.217	.221	.224
590	23.228	23.232	23.236	23.240	23.244	23.248	23.252	23.256	23.260	23.264
591	23.268	.272	.276	.280	.284	.287	.291	.295	.299	.303
592	23.307	.311	.315	.319	.323	.327	.331	.335	.339	.343
593	23.347	.350	.354	.358	.362	.366	.370	.374	.378	.382
594	23.386	.390	.394	.398	.402	.406	.410	.413	.417	.421
595	23.425	23.429	23.433	23.437	23.441	23.445	23.449	23.453	23.457	23.461
596	23.465	.469	.473	.476	.480	.484	.488	.492	.496	.500
597	23.504	.508	.512	.516	.520	.524	.528	.532	.536	.539
598	23.543	.547	.551	.555	.559	.563	.567	.571	.575	.579
599	23.583	.587	.591	.595	.598	.602	.606	.610	.614	.618
600	23.622	.626	.630	.634	.638	.642	.646	.650	.654	.658

XXXII.—MILLIMETRES TO INCHES.

mm.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
600	23.622	23.626	23.630	23.634	23.638	23.642	23.646	23.650	23.654	23.658
601	23.661	.665	.669	.673	.677	.681	.685	.689	.693	.697
602	23.701	.705	.709	.713	.717	.721	.724	.728	.732	.736
603	23.740	.744	.748	.752	.756	.760	.764	.768	.772	.776
604	23.780	.784	.787	.791	.795	.799	.803	.807	.811	.815
605	23.819	23.823	23.827	23.831	23.835	23.839	23.843	23.847	23.850	23.854
606	23.858	.862	.866	.870	.874	.878	.882	.886	.890	.894
607	23.898	.902	.906	.910	.913	.917	.921	.925	.929	.933
608	23.937	.941	.945	.949	.953	.957	.961	.965	.969	.973
609	23.976	.980	.984	.988	.992	.996	24.000	24.004	24.008	24.012
610	24.016	24.020	24.024	24.028	24.032	24.036	24.039	24.043	24.047	24.051
611	24.055	.059	.063	.067	.071	.075	.079	.083	.087	.091
612	24.095	.098	.102	.106	.110	.114	.118	.122	.126	.130
613	24.134	.138	.142	.146	.150	.154	.158	.161	.165	.169
614	24.173	.177	.181	.185	.189	.193	.197	.201	.205	.209
615	24.213	24.217	24.221	24.224	24.228	24.232	24.236	24.240	24.244	24.248
616	24.252	.256	.260	.264	.268	.272	.276	.280	.284	.287
617	24.291	.295	.299	.303	.307	.311	.315	.319	.323	.327
618	24.331	.335	.339	.343	.347	.350	.354	.358	.362	.366
619	24.370	.374	.378	.382	.386	.390	.394	.398	.402	.406
620	24.410	24.413	24.417	24.421	24.425	24.429	24.433	24.437	24.441	24.445
621	24.449	.453	.457	.461	.465	.469	.473	.476	.480	.484
622	24.488	.492	.496	.500	.504	.508	.512	.516	.520	.524
623	24.528	.532	.536	.539	.543	.547	.551	.555	.559	.563
624	24.567	.571	.575	.579	.583	.587	.591	.595	.599	.602
625	24.606	24.610	24.614	24.618	24.622	24.626	24.630	24.634	24.638	24.642
626	24.646	.650	.654	.658	.661	.665	.669	.673	.677	.681
627	24.685	.689	.693	.697	.701	.705	.709	.713	.717	.721
628	24.724	.728	.732	.736	.740	.744	.748	.752	.756	.760
629	24.764	.768	.772	.776	.780	.784	.787	.791	.795	.799
630	24.803	24.807	24.811	24.815	24.819	24.823	24.827	24.831	24.835	24.839
631	24.843	.847	.850	.854	.858	.862	.866	.870	.874	.878
632	24.882	.886	.890	.894	.898	.902	.906	.910	.913	.917
633	24.921	.925	.929	.933	.937	.941	.945	.949	.953	.957
634	24.961	.965	.969	.973	.976	.980	.984	.988	.992	.996
635	25.000	25.004	25.008	25.012	25.016	25.020	25.024	25.028	25.032	25.036
636	25.039	.043	.047	.051	.055	.059	.063	.067	.071	.075
637	25.079	.083	.087	.091	.095	.099	.102	.106	.110	.114
638	25.118	.122	.126	.130	.134	.138	.142	.146	.150	.154
639	25.158	.161	.165	.169	.173	.177	.181	.185	.189	.193
640	25.197	25.201	25.205	25.209	25.213	25.217	25.221	25.224	25.228	25.232
641	25.236	.240	.244	.248	.252	.256	.260	.264	.268	.272
642	25.276	.280	.284	.287	.291	.295	.299	.303	.307	.311
643	25.315	.319	.323	.327	.331	.335	.339	.343	.347	.350
644	25.354	.358	.362	.366	.370	.374	.378	.382	.386	.390
645	25.394	25.398	25.402	25.406	25.410	25.413	25.417	25.421	25.425	25.429
646	25.433	.437	.441	.445	.449	.453	.457	.461	.465	.469
647	25.473	.476	.480	.484	.488	.492	.496	.500	.504	.508
648	25.512	.516	.520	.524	.528	.532	.536	.539	.543	.547
649	25.551	.555	.559	.563	.567	.571	.575	.579	.583	.587
650	25.591	.595	.599	.602	.606	.610	.614	.618	.622	.626

XXXII.—MILLIMETRES TO INCHES.

mm.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
650	25.591	25.595	25.599	25.602	25.606	25.610	25.614	25.618	25.622	25.626
651	25.630	.634	.638	.642	.646	.650	.654	.658	.661	.665
652	25.669	.673	.677	.681	.685	.689	.693	.697	.701	.705
653	25.709	.713	.717	.721	.724	.728	.732	.736	.740	.744
654	25.748	.752	.756	.760	.764	.768	.772	.776	.780	.784
655	25.787	25.791	25.795	25.799	25.803	25.807	25.811	25.815	25.819	25.823
656	25.827	.831	.835	.839	.843	.847	.850	.854	.858	.862
657	25.866	.870	.874	.878	.882	.886	.890	.894	.898	.902
658	25.906	.910	.913	.917	.921	.925	.929	.933	.937	.941
659	25.945	.949	.953	.957	.961	.965	.969	.973	.976	.980
660	25.984	25.988	25.992	25.996	26.000	26.004	26.008	26.012	26.016	26.020
661	26.024	.028	.032	.036	.039	.043	.047	.051	.055	.059
662	26.063	.067	.071	.075	.079	.083	.087	.091	.095	.099
663	26.102	.106	.110	.114	.118	.122	.126	.130	.134	.138
664	26.142	.146	.150	.154	.158	.161	.165	.169	.173	.177
665	26.181	26.185	26.189	26.193	26.197	26.201	26.205	26.209	26.213	26.217
666	26.221	.224	.228	.232	.236	.240	.244	.248	.252	.256
667	26.260	.264	.268	.272	.276	.280	.284	.287	.291	.295
668	26.299	.303	.307	.311	.315	.319	.323	.327	.331	.335
669	26.339	.343	.347	.350	.354	.358	.362	.366	.370	.374
670	26.378	26.382	26.386	26.390	26.394	26.398	26.402	26.406	26.410	26.413
671	26.417	.421	.425	.429	.433	.437	.441	.445	.449	.453
672	26.457	.461	.465	.469	.473	.476	.480	.484	.488	.492
673	26.496	.500	.504	.508	.512	.516	.520	.524	.528	.532
674	26.536	.539	.543	.547	.551	.555	.559	.563	.567	.571
675	26.575	26.579	26.583	26.587	26.591	26.595	26.599	26.602	26.606	26.610
676	26.614	.618	.622	.626	.630	.634	.638	.642	.646	.650
677	26.654	.658	.661	.665	.669	.673	.677	.681	.685	.689
678	26.693	.697	.701	.705	.709	.713	.717	.721	.724	.728
679	26.732	.736	.740	.744	.748	.752	.756	.760	.764	.768
680	26.772	26.776	26.780	26.784	26.787	26.791	26.795	26.799	26.803	26.807
681	26.811	.815	.819	.823	.827	.831	.835	.839	.843	.847
682	26.850	.854	.858	.862	.866	.870	.874	.878	.882	.886
683	26.890	.894	.898	.902	.906	.910	.913	.917	.921	.925
684	26.929	.933	.937	.941	.945	.949	.953	.957	.961	.965
685	26.969	26.973	26.976	26.980	26.984	26.988	26.992	26.996	27.000	27.004
686	27.008	27.012	27.016	27.020	27.024	27.028	27.032	27.036	.039	.043
687	27.047	.051	.055	.059	.063	.067	.071	.075	.079	.083
688	27.087	.091	.095	.099	.102	.106	.110	.114	.118	.122
689	27.126	.130	.134	.138	.142	.146	.150	.154	.158	.162
690	27.165	27.169	27.173	27.177	27.181	27.185	27.189	27.193	27.197	27.201
691	27.205	.209	.213	.217	.221	.224	.228	.232	.236	.240
692	27.244	.248	.252	.256	.260	.264	.268	.272	.276	.280
693	27.284	.287	.291	.295	.299	.303	.307	.311	.315	.319
694	27.323	.327	.331	.335	.339	.343	.347	.350	.354	.358
695	27.362	27.366	27.370	27.374	27.378	27.382	27.386	27.390	27.394	27.398
696	27.402	.406	.410	.413	.417	.421	.425	.429	.433	.437
697	27.441	.445	.449	.453	.457	.461	.465	.469	.473	.476
698	27.480	.484	.488	.492	.496	.500	.504	.508	.512	.516
699	27.520	.524	.528	.532	.536	.539	.543	.547	.551	.555
700	27.559	.563	.567	.571	.575	.579	.583	.587	.591	.595

XXXII.—MILLIMETRES TO INCHES.

mm.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
700	27.559	27.563	27.567	27.571	27.575	27.579	27.583	27.587	27.591	27.595
701	27.599	.602	.606	.610	.614	.618	.622	.626	.630	.634
702	27.638	.642	.646	.650	.654	.658	.662	.665	.669	.673
703	27.677	.681	.685	.689	.693	.697	.701	.705	.709	.713
704	27.717	.721	.724	.728	.732	.736	.740	.744	.748	.752
705	27.756	27.760	27.764	27.768	27.772	27.776	27.780	27.784	27.787	27.791
706	27.795	.799	.803	.807	.811	.815	.819	.823	.827	.831
707	27.835	.839	.843	.847	.850	.854	.858	.862	.866	.870
708	27.874	.878	.882	.886	.890	.894	.898	.902	.906	.910
709	27.913	.917	.921	.925	.929	.933	.937	.941	.945	.949
710	27.953	27.957	27.961	27.965	27.969	27.973	27.976	27.980	27.984	27.988
711	27.992	27.996	28.000	28.004	28.008	28.012	28.016	28.020	28.024	28.028
712	28.032	28.036	.039	.043	.047	.051	.055	.059	.063	.067
713	28.071	.075	.079	.083	.087	.091	.095	.099	.102	.106
714	28.110	.114	.118	.122	.126	.130	.134	.138	.142	.146
715	28.150	28.154	28.158	28.162	28.165	28.169	28.173	28.177	28.181	28.185
716	28.189	.193	.197	.201	.205	.209	213	.217	.221	.224
717	28.228	.232	.236	.240	.244	.248	.252	.256	.260	.264
718	28.268	.272	.276	.280	.284	.287	.291	.295	.299	.303
719	28.307	.311	.315	.319	.323	.327	.331	.335	.339	.343
720	28.347	28.350	28.354	28.358	28.362	28.366	28.370	28.374	28.378	28.382
721	28.386	.390	.394	.398	.402	.406	.410	.413	.417	.421
722	28.425	.429	.433	.437	.441	.445	.449	.453	.457	.461
723	28.465	.469	.473	.476	.480	.484	.488	.492	.496	.500
724	28.504	.508	.512	.516	.520	.524	.528	.532	.536	.539
725	28.543	28.547	28.551	28.555	28.559	28.563	28.567	28.571	28.575	28.579
726	28.583	.587	.591	.595	.599	.602	.606	.610	.614	.618
727	28.622	.626	.630	.634	.638	.642	.646	.650	.654	.658
728	28.662	.665	.669	.673	.677	.681	.685	.689	.693	.697
729	28.701	.705	.709	.713	.717	.721	.724	.728	.732	.736
730	28.740	28.744	28.748	28.752	28.756	28.760	28.764	28.768	28.772	28.776
731	28.780	.784	.787	.791	.795	.799	.803	.807	.811	.815
732	28.819	.823	.827	.831	.835	.839	.843	.847	.850	.854
733	28.858	.862	.866	.870	.874	.878	.882	.886	.890	.894
734	28.898	.902	.906	.910	.913	.917	.921	.925	.929	.933
735	28.937	28.941	28.945	28.949	28.953	28.957	28.961	28.965	28.969	28.973
736	28.976	.980	.984	.988	.992	.996	29.000	29.004	29.008	29.012
737	29.016	29.020	29.024	29.028	29.032	29.036	.039	.043	.047	.051
738	29.055	.059	.063	.067	.071	.075	.079	.083	.087	.091
739	29.095	.099	.102	.106	.110	.114	.118	.122	.126	.130
740	29.134	29.138	29.142	29.146	29.150	29.154	29.158	29.162	29.165	29.169
741	29.173	.177	.181	.185	.189	.193	.197	.201	.205	.209
742	29.213	.217	.221	.224	.228	.232	.236	.240	.244	.248
743	29.252	.256	.260	.264	.268	.272	.276	.280	.284	.287
744	29.291	.295	.299	.303	.307	.311	.315	.319	.323	.327
745	29.331	29.335	29.339	29.343	29.347	29.350	29.354	29.358	29.362	29.366
746	29.370	.374	.378	.382	.386	.390	.394	.398	.402	.406
747	29.410	.413	.417	.421	.425	.429	.433	.437	.441	.445
748	29.449	.453	.457	.461	.465	.469	.473	.476	.480	.484
749	29.488	.492	.496	.500	.504	.508	.512	.516	.520	.524
750	29.528	.532	.536	.539	.543	.547	.551	.555	.559	.563

XXXII.—MILLIMETRES TO INCHES.

mm.	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
750	29.528	29.532	29.536	29.539	29.543	29.547	29.551	29.555	29.559	29.563
751	29.567	.571	.575	.579	.583	.587	.591	.595	.599	.602
752	29.606	.610	.614	.618	.622	.626	.630	.634	.638	.642
753	29.646	.650	.654	.658	.662	.665	669	.673	.677	.681
754	29.685	.689	.693	.697	.701	.705	.709	.713	.717	.721
755	29.725	29.728	29.732	29.736	29.740	29.744	29.748	29.752	29.756	29.760
756	29.764	.768	.772	.776	.780	.784	.787	.791	.795	.799
757	29.803	.807	.811	.815	.819	.823	.827	.831	.835	.839
758	29.843	.847	.850	.854	.858	.862	.866	.870	.874	.878
759	29.882	.886	.890	.894	.898	.902	.906	.910	.913	.917
760	29.921	29.925	29.929	29.933	29.937	29.941	29.945	29.949	29 953	29.957
761	29.961	.965	.969	.973	.976	.980	.984	.988	.992	.996
762	30.000	30.004	30.008	30.012	30.016	30.020	30.024	30.028	30 032	30.036
763	30.039	.043	.047	.051	.055	.059	.063	.067	.071	.075
764	30.079	.083	.087	.091	.095	.099	.102	.106	.110	.114
765	30.118	30.122	30.126	30.130	30.134	30.138	30.142	30.146	30.150	30.154
766	30 158	.162	.165	.169	.173	.177	.181	.185	.189	.193
767	30.197	.201	.205	.209	.213	.217	.221	.225	.228	.232
768	30.236	.240	.244	.248	.252	.256	.260	.264	268	.272
769	30.276	.280	.284	.287	.291	.295	.299	.303	.307	.311
770	30.315	30.319	30.323	30.327	30.331	30.335	30.339	30.343	30.347	30.350
771	30.354	.358	.362	.366	.370	.374	.378	.382	.386	.390
772	30.394	.398	.402	.406	.410	.413	.417	.421	.425	.429
773	30.433	.437	.441	.445	.449	.453	.457	.461	.465	.469
774	30 473	.476	.480	.484	.488	.492	.496	.500	.504	.508
775	30.512	30.516	30.520	30.524	30.528	30.532	30.536	30.539	30.543	30.547
776	30.551	.555	.559	.563	.567	.571	.575	.579	.583	.587
777	30.591	.595	.599	.602	.606	.610	.614	.618	.622	.626
778	30.630	.634	.638	.642	.646	.650	.654	.658	.662	.665
779	30.669	.673	.677	.681	.685	.689	.693	.697	.701	.705
780	30.709	30.713	30.717	30.721	30.725	30.728	30.732	30.736	30.740	30.744
781	30.748	.752	.756	.760	.764	.768	.772	.776	.780	.784
782	30 787	.791	.795	.799	.803	.807	.811	.815	.819	.823
783	30.827	.831	.835	.839	.843	.847	.850	.854	.858	.862
784	30 866	.870	.874	.878	.882	.886	.890	.894	.898	.902
785	30.906	30.910	30.913	30.917	30.921	30.925	30.929	30.933	30.937	30.941
786	30.945	.949	.953	.957	.961	.965	.969	.973	.976	.980
787	30.984	.988	.992	.996	31.000	31.004	31.008	31.012	31.016	31.020
788	31.024	31.028	31.032	31.036	.039	.043	.047	.051	.055	.059
789	31.063	.067	. .071	.075	.079	.083	.087	.091	.095	.099
790	31.102	31.106	31.110	31.114	31.118	31.122	31.126	31.130	31.134	31.138
791	31.142	.146	.150	.154	.158	.162	.165	.169	.173	.177
792	31.181	.185	.189	.193	.197	.201	.205	.209	.213	.217
793	31.221	.225	.228	.232	.236	.240	.244	.248	.252	.256
794	31.260	.264	.268	.272	.276	.280	.284	.287	.291	.295
795	31.299	31.303	31.307	31.311	31.315	31.319	31.323	31.327	31.331	31.335
796	31.339	.343	.347	.350	.354	.358	.362	.366	.370	.374
797	31.378	.382	.386	.390	.394	.398	.402	.406	.410	.413
798	31.417	.421	.425	.429	.433	.437	.441	.445	.449	.453
799	31.457	.461	.465	.469	.473	.476	.480	.484	.488	.492
800	31.496	.500	.504	.508	.512	.516	.520	.524	.528	.532

TABLE XXXIII.—METRES TO FEET.

1 m. = 3.28085 feet.

(Original.)

Metres	0	1	2	3	4	5	6	7	8	9
0	0	3	7	10	13	16	20	23	26	30
10	33	36	39	43	46	49	52	56	59	62
20	66	69	72	75	79	82	85	89	92	95
30	98	102	105	108	112	115	118	121	125	128
40	131	135	138	141	144	148	151	154	157	161
50	164	167	171	174	177	180	184	187	190	194
60	197	200	203	207	210	213	217	220	223	226
70	230	233	236	240	243	246	249	253	256	259
80	262	266	269	272	276	279	282	285	289	292
90	295	299	302	305	308	312	315	318	322	325
100	328	331	335	338	341	344	348	351	354	358
110	361	364	367	371	374	377	381	384	387	390
120	394	397	400	404	407	410	413	417	420	423
130	427	430	433	436	440	443	446	449	453	456
140	459	463	466	469	472	476	479	482	486	489
150	492	495	499	502	505	509	512	515	518	522
160	525	528	531	535	538	541	545	548	551	554
170	558	561	564	568	571	574	577	581	584	587
180	591	594	597	600	604	607	610	614	617	620
190	623	627	630	633	636	640	643	646	650	653
200	656	659	663	666	669	673	676	679	682	686
210	689	692	696	699	702	705	709	712	715	719
220	722	725	728	732	735	738	741	745	748	751
230	755	758	761	764	768	771	774	778	781	784
240	787	791	794	797	801	804	807	810	814	817
250	820	823	827	830	833	837	840	843	846	850
260	853	856	860	863	866	869	873	876	879	882
270	886	889	892	896	899	902	906	909	912	915
280	919	922	925	928	932	935	938	942	945	948
290	951	955	958	961	965	968	971	974	978	981
300	984	988	991	994	997	1001	1004	1007	1011	1014
310	1017	1020	1024	1027	1030	1033	1037	1040	1043	1047
320	1050	1053	1056	1060	1063	1066	1070	1073	1076	1079
330	1083	1086	1089	1093	1096	1099	1102	1106	1109	1112
340	1115	1119	1122	1125	1129	1132	1135	1138	1142	1145
350	1148	1152	1155	1158	1161	1165	1168	1171	1175	1178
360	1181	1184	1188	1191	1194	1198	1201	1204	1207	1211
370	1214	1217	1220	1224	1227	1230	1234	1237	1240	1243
380	1247	1250	1253	1257	1260	1263	1266	1270	1273	1276
390	1280	1283	1286	1289	1293	1296	1299	1302	1306	1309
400	1312	1316	1319	1322	1325	1329	1332	1335	1339	1342
410	1345	1348	1352	1355	1358	1362	1365	1368	1371	1375
420	1378	1381	1385	1388	1391	1394	1398	1401	1404	1407
430	1411	1414	1417	1421	1424	1427	1430	1434	1437	1440
440	1444	1447	1450	1453	1457	1460	1463	1467	1470	1473
450	1476	1480	1483	1486	1490	1493	1496	1499	1503	1506
460	1509	1512	1516	1519	1522	1526	1529	1532	1535	1539
470	1542	1545	1549	1552	1555	1558	1562	1565	1568	1572
480	1575	1578	1581	1585	1588	1591	1594	1598	1601	1604
490	1608	1611	1614	1617	1621	1624	1627	1631	1634	1637
500	1640	1644	1647	1650	1654	1657	1660	1663	1667	1670

XXXIII.—METRES TO FEET.

Metres	0	1	2	3	4	5	6	7	8	9
500	1640	1644	1647	1650	1654	1657	1660	1663	1667	1670
510	1673	1676	1680	1683	1686	1690	1693	1696	1699	1703
520	1706	1709	1713	1716	1719	1722	1726	1729	1732	1736
530	1739	1742	1745	1749	1752	1755	1759	1762	1765	1768
540	1772	1775	1778	1782	1785	1788	1791	1795	1798	1801
550	1804	1808	1811	1814	1818	1821	1824	1827	1831	1834
560	1837	1841	1844	1847	1850	1854	1857	1860	1864	1867
570	1870	1873	1877	1880	1883	1886	1890	1893	1896	1900
580	1903	1906	1909	1913	1916	1919	1923	1926	1929	1932
590	1936	1939	1942	1946	1949	1952	1955	1959	1962	1965
600	1969	1972	1975	1978	1982	1985	1988	1991	1995	1998
610	2001	2005	2008	2011	2014	2018	2021	2024	2028	2031
620	2034	2037	2041	2044	2047	2051	2054	2057	2060	2064
630	2067	2070	2073	2077	2080	2083	2087	2090	2093	2096
640	2100	2103	2106	2110	2113	2116	2119	2123	2126	2129
650	2133	2136	2139	2142	2146	2149	2152	2156	2159	2162
660	2165	2169	2172	2175	2178	2182	2185	2188	2192	2195
670	2198	2201	2205	2208	2211	2215	2218	2221	2224	2228
680	2231	2234	2238	2241	2244	2247	2251	2254	2257	2261
690	2264	2267	2270	2274	2277	2280	2283	2287	2290	2293
700	2297	2300	2303	2306	2310	2313	2316	2320	2323	2326
710	2329	2333	2336	2339	2343	2346	2349	2352	2356	2359
720	2362	2365	2369	2372	2375	2379	2382	2385	2388	2392
730	2395	2398	2402	2405	2408	2411	2415	2418	2421	2425
740	2428	2431	2434	2438	2441	2444	2448	2451	2454	2457
750	2461	2464	2467	2470	2474	2477	2480	2484	2487	2490
760	2493	2497	2500	2503	2507	2510	2513	2516	2520	2523
770	2526	2530	2533	2536	2539	2543	2546	2549	2553	2556
780	2559	2562	2566	2569	2572	2575	2579	2582	2585	2589
790	2592	2595	2598	2602	2605	2608	2612	2615	2618	2621
800	2625	2628	2631	2635	2638	2641	2644	2648	2651	2654
810	2657	2661	2664	2667	2671	2674	2677	2680	2684	2687
820	2690	2694	2697	2700	2703	2707	2710	2713	2717	2720
830	2723	2726	2730	2733	2736	2740	2743	2746	2749	2753
840	2756	2759	2762	2766	2769	2772	2776	2779	2782	2785
850	2789	2792	2795	2799	2802	2805	2808	2812	2815	2818
860	2822	2825	2828	2831	2835	2838	2841	2844	2848	2851
870	2854	2858	2861	2864	2867	2871	2874	2877	2881	2884
880	2887	2890	2894	2897	2900	2904	2907	2910	2913	2917
890	2920	2923	2927	2930	2933	2936	2940	2943	2946	2949
900	2953	2956	2959	2963	2966	2969	2972	2976	2979	2982
910	2986	2989	2992	2995	2999	3002	3005	3009	3012	3015
920	3018	3022	3025	3028	3032	3035	3038	3041	3045	3048
930	3051	3054	3058	3061	3064	3068	3071	3074	3077	3081
940	3084	3087	3091	3094	3097	3100	3104	3107	3110	3114
950	3117	3120	3123	3127	3130	3133	3136	3140	3143	3146
960	3150	3153	3156	3159	3163	3166	3169	3173	3176	3179
970	3182	3186	3189	3192	3196	3199	3202	3205	3209	3212
980	3215	3219	3222	3225	3228	3232	3235	3238	3241	3245
990	3248	3251	3255	3258	3261	3264	3268	3271	3274	3278
1000	3281	3284	3287	3291	3294	3297	3301	3304	3307	3310

XXXIII.—METRES TO FEET.

Metres	0	1	2	3	4	5	6	7	8	9
1000	3281	3284	3287	3291	3294	3297	3301	3304	3307	3310
1010	3314	3317	3320	3324	3327	3330	3333	3337	3340	3343
1020	3346	3350	3353	3356	3360	3363	3366	3369	3373	3376
1030	3379	3383	3386	3389	3392	3396	3399	3402	3406	3409
1040	3412	3415	3419	3422	3425	3428	3432	3435	3438	3442
1050	3445	3448	3451	3455	3458	3461	3465	3468	3471	3474
1060	3478	3481	3484	3488	3491	3494	3497	3501	3504	3507
1070	3511	3514	3517	3520	3524	3527	3530	3533	3537	3540
1080	3543	3547	3550	3553	3556	3560	3563	3566	3570	3573
1090	3576	3579	3583	3586	3589	3593	3596	3599	3602	3606
1100	3609	3612	3615	3619	3622	3625	3629	3632	3635	3638
1110	3642	3645	3648	3652	3655	3658	3661	3665	3668	3671
1120	3675	3678	3681	3684	3688	3691	3694	3698	3701	3704
1130	3707	3711	3714	3717	3720	3724	3727	3730	3734	3737
1140	3740	3743	3747	3750	3753	3757	3760	3763	3766	3770
1150	3773	3776	3779	3783	3786	3789	3792	3796	3799	3802
1160	3806	3809	3812	3816	3819	3822	3825	3829	3832	3835
1170	3839	3842	3845	3848	3852	3855	3858	3862	3865	3868
1180	3871	3875	3878	3881	3885	3888	3891	3894	3898	3901
1190	3904	3907	3911	3914	3917	3921	3924	3927	3930	3934
1200	3937	3940	3944	3947	3950	3953	3957	3960	3963	3967
1210	3970	3973	3976	3980	3983	3986	3990	3993	3996	3999
1220	4003	4006	4009	4012	4016	4019	4022	4026	4029	4032
1230	4035	4039	4042	4045	4049	4052	4055	4058	4062	4065
1240	4068	4072	4075	4078	4081	4085	4088	4091	4095	4098
1250	4101	4104	4108	4111	4114	4117	4121	4124	4127	4131
1260	4134	4137	4140	4144	4147	4150	4154	4157	4160	4163
1270	4167	4170	4173	4177	4180	4183	4186	4190	4193	4196
1280	4199	4203	4206	4209	4213	4216	4219	4222	4226	4229
1290	4232	4236	4239	4242	4245	4249	4252	4255	4259	4262
1300	4265	4268	4272	4275	4278	4282	4285	4288	4291	4295
1310	4298	4301	4304	4308	4311	4314	4318	4321	4324	4327
1320	4331	4334	4337	4341	4344	4347	4350	4354	4357	4360
1330	4364	4367	4370	4373	4377	4380	4383	4386	4390	4393
1340	4396	4400	4403	4406	4409	4413	4416	4419	4423	4426
1350	4429	4432	4436	4439	4442	4446	4449	4452	4455	4459
1360	4462	4465	4469	4472	4475	4478	4482	4485	4488	4491
1370	4495	4498	4501	4505	4508	4511	4514	4518	4521	4524
1380	4528	4531	4534	4537	4541	4544	4547	4551	4554	4557
1390	4560	4564	4567	4570	4574	4577	4580	4583	4587	4590
1400	4593	4596	4600	4603	4606	4610	4613	4616	4619	4623
1410	4626	4629	4633	4636	4639	4642	4646	4649	4652	4656
1420	4659	4662	4665	4669	4672	4675	4678	4682	4685	4688
1430	4692	4695	4698	4701	4705	4708	4711	4715	4718	4721
1440	4724	4728	4731	4734	4738	4741	4744	4747	4751	4754
1450	4757	4761	4764	4767	4770	4774	4777	4780	4783	4787
1460	4790	4793	4797	4800	4803	4806	4810	4813	4816	4820
1470	4823	4826	4829	4833	4836	4839	4843	4846	4849	4852
1480	4856	4859	4862	4866	4869	4872	4875	4879	4882	4885
1490	4888	4892	4895	4898	4902	4905	4908	4911	4915	4918
1500	4921	4925	4928	4931	4934	4938	4941	4944	4948	4951

XXXIII.—METRES TO FEET.

Metres	0	1	2	3	4	5	6	7	8	9
1500	4921	4925	4928	4931	4934	4938	4941	4944	4948	4951
1510	4954	4957	4961	4964	4967	4970	4974	4977	4980	4984
1520	4987	4990	4993	4997	5000	5003	5007	5010	5013	5016
1530	5020	5023	5026	5030	5033	5036	5039	5043	5046	5049
1540	5053	5056	5059	5062	5066	5069	5072	5075	5079	5082
1550	5085	5089	5092	5095	5098	5102	5105	5108	5112	5115
1560	5118	5121	5125	5128	5131	5135	5138	5141	5144	5148
1570	5151	5154	5157	5161	5164	5167	5171	5174	5177	5180
1580	5184	5187	5190	5194	5197	5200	5203	5207	5210	5213
1590	5217	5220	5223	5226	5230	5233	5236	5240	5243	5246
1600	5249	5253	5256	5259	5262	5266	5269	5272	5276	5279
1610	5282	5285	5289	5292	5295	5299	5302	5305	5308	5312
1620	5315	5318	5322	5325	5328	5331	5335	5338	5341	5345
1630	5348	5351	5354	5358	5361	5364	5367	5371	5374	5377
1640	5381	5384	5387	5390	5394	5397	5400	5404	5407	5410
1650	5413	5417	5420	5423	5427	5430	5433	5436	5440	5443
1660	5446	5449	5453	5456	5459	5463	5466	5469	5472	5476
1670	5479	5482	5486	5489	5492	5495	5499	5502	5505	5509
1680	5512	5515	5518	5522	5525	5528	5532	5535	5538	5541
1690	5545	5548	5551	5554	5558	5561	5564	5568	5571	5574
1700	5577	5581	5584	5587	5591	5594	5597	5600	5604	5607
1710	5610	5614	5617	5620	5623	5627	5630	5633	5637	5640
1720	5643	5646	5650	5653	5656	5659	5663	5666	5669	5673
1730	5676	5679	5682	5686	5689	5692	5696	5699	5702	5705
1740	5709	5712	5715	5719	5722	5725	5728	5732	5735	5738
1750	5741	5745	5748	5751	5755	5758	5761	5764	5768	5771
1760	5774	5778	5781	5784	5787	5791	5794	5797	5801	5804
1770	5807	5810	5814	5817	5820	5824	5827	5830	5833	5837
1780	5840	5843	5846	5850	5853	5856	5860	5863	5866	5869
1790	5873	5876	5879	5883	5886	5889	5892	5896	5899	5902
1800	5906	5909	5912	5915	5919	5922	5925	5928	5932	5935
1810	5938	5942	5945	5948	5951	5955	5958	5961	5965	5968
1820	5971	5974	5978	5981	5984	5988	5991	5994	5997	6001
1830	6004	6007	6011	6014	6017	6020	6024	6027	6030	6033
1840	6037	6040	6043	6047	6050	6053	6056	6060	6063	6066
1850	6070	6073	6076	6079	6083	6086	6089	6093	6096	6099
1860	6102	6106	6109	6112	6116	6119	6122	6125	6129	6132
1870	6135	6138	6142	6145	6148	6152	6155	6158	6161	6165
1880	6168	6171	6175	6178	6181	6184	6188	6191	6194	6198
1890	6201	6204	6207	6211	6214	6217	6220	6224	6227	6230
1900	6234	6237	6240	6243	6247	6250	6253	6257	6260	6263
1910	6266	6270	6273	6276	6280	6283	6286	6289	6293	6296
1920	6299	6303	6306	6309	6312	6316	6319	6322	6325	6329
1930	6332	6335	6339	6342	6345	6348	6352	6355	6358	6361
1940	6365	6368	6371	6375	6378	6381	6385	6388	6391	6394
1950	6398	6401	6404	6408	6411	6414	6417	6421	6424	6427
1960	6430	6434	6437	6440	6444	6447	6450	6453	6457	6460
1970	6463	6467	6470	6473	6476	6480	6483	6486	6490	6493
1980	6496	6499	6503	6506	6509	6512	6516	6519	6522	6526
1990	6529	6532	6535	6539	6542	6545	6549	6552	6555	6559
2000	6562	6565	6568	6572	6575	6578	6581	6585	6588	6591

XXXIII.—METRES TO FEET.

Metres	0	1	2	3	4	5	6	7	8	9
2000	6562	6565	6568	6572	6575	6578	6581	6585	6588	6591
2010	6595	6598	6601	6604	6608	6611	6614	6617	6621	6624
2020	6627	6630	6634	6637	6640	6643	6647	6650	6654	6657
2030	6660	6663	6667	6670	6673	6677	6680	6683	6686	6690
2040	6693	6696	6699	6703	6706	6709	6713	6716	6719	6722
2050	6726	6729	6732	6736	6739	6742	6745	6749	6752	6755
2060	6759	6762	6765	6768	6772	6775	6778	6782	6785	6788
2070	6791	6795	6798	6801	6804	6808	6811	6814	6818	6821
2080	6824	6827	6831	6834	6837	6841	6844	6847	6850	6854
2090	6857	6860	6864	6867	6870	6873	6877	6880	6883	6887
2100	6890	6893	6896	6900	6903	6906	6909	6913	6916	6919
2110	6923	6926	6929	6932	6936	6939	6942	6946	6949	6952
2120	6955	6959	6962	6965	6969	6972	6975	6978	6982	6985
2130	6988	6991	6995	6998	7001	7005	7008	7011	7014	7018
2140	7021	7024	7028	7031	7034	7037	7041	7044	7047	7051
2150	7054	7057	7060	7064	7067	7070	7074	7077	7080	7083
2160	7087	7090	7093	7096	7100	7103	7106	7110	7113	7116
2170	7119	7123	7126	7129	7133	7136	7139	7142	7146	7149
2180	7152	7156	7159	7162	7165	7169	7172	7175	7179	7182
2190	7185	7188	7192	7195	7198	7201	7205	7208	7211	7215
2200	7218	7221	7224	7228	7231	7234	7238	7241	7244	7247
2210	7251	7254	7257	7261	7264	7267	7270	7274	7277	7280
2220	7283	7287	7290	7293	7297	7300	7303	7306	7310	7313
2230	7316	7320	7323	7326	7329	7333	7336	7339	7343	7346
2240	7349	7352	7356	7359	7362	7366	7369	7372	7375	7379
2250	7382	7385	7388	7392	7395	7398	7402	7405	7408	7411
2260	7415	7418	7421	7425	7428	7431	7434	7438	7441	7444
2270	7448	7451	7454	7457	7461	7464	7467	7470	7474	7477
2280	7480	7484	7487	7490	7493	7497	7500	7503	7507	7510
2290	7513	7516	7520	7523	7526	7530	7533	7536	7539	7543
2300	7546	7549	7553	7556	7559	7562	7566	7569	7572	7575
2310	7579	7582	7585	7589	7592	7595	7598	7602	7605	7608
2320	7612	7615	7618	7621	7625	7628	7631	7635	7638	7641
2330	7644	7648	7651	7654	7658	7661	7664	7667	7671	7674
2340	7677	7680	7684	7687	7690	7694	7697	7700	7703	7707
2350	7710	7713	7717	7720	7723	7726	7730	7733	7736	7740
2360	7743	7746	7749	7753	7756	7759	7762	7766	7769	7772
2370	7776	7779	7782	7785	7789	7792	7795	7799	7802	7805
2380	7808	7812	7815	7818	7822	7825	7828	7831	7835	7838
2390	7841	7845	7848	7851	7854	7858	7861	7864	7867	7871
2400	7874	7877	7881	7884	7887	7890	7894	7897	7900	7904
2410	7907	7910	7913	7917	7920	7923	7927	7930	7933	7936
2420	7940	7943	7946	7950	7953	7956	7959	7963	7966	7969
2430	7972	7976	7979	7982	7986	7989	7992	7995	7999	8002
2440	8005	8009	8012	8015	8018	8022	8025	8028	8032	8035
2450	8038	8041	8045	8048	8051	8054	8058	8061	8064	8068
2460	8071	8074	8077	8081	8084	8087	8091	8094	8097	8100
2470	8104	8107	8110	8114	8117	8120	8123	8127	8130	8133
2480	8137	8140	8143	8146	8150	8153	8156	8159	8163	8166
2490	8169	8173	8176	8179	8182	8186	8189	8192	8196	8199
2500	8202	8205	8209	8212	8215	8219	8222	8225	8228	8232

XXXIII.—METRES TO FEET.

Metres	0	1	2	3	4	5	6	7	8	9
2500	8202	8205	8209	8212	8215	8219	8222	8225	8228	8232
2510	8235	8238	8241	8245	8248	8251	8255	8258	8261	8264
2520	8268	8271	8274	8278	8281	8284	8287	8291	8294	8297
2530	8301	8304	8307	8310	8314	8317	8320	8324	8327	8330
2540	8333	8337	8340	8343	8346	8350	8353	8356	8360	8363
2550	8366	8369	8373	8376	8379	8383	8386	8389	8392	8396
2560	8399	8402	8406	8409	8412	8415	8419	8422	8425	8429
2570	8432	8435	8438	8442	8445	8448	8451	8455	8458	8461
2580	8465	8468	8471	8474	8478	8481	8484	8488	8491	8494
2590	8497	8501	8504	8507	8511	8514	8517	8520	8524	8527
2600	8530	8533	8537	8540	8543	8547	8550	8553	8556	8560
2610	8563	8566	8570	8573	8576	8579	8583	8586	8589	8593
2620	8596	8599	8602	8606	8609	8612	8616	8619	8622	8625
2630	8629	8632	8635	8638	8642	8645	8649	8652	8655	8658
2640	8661	8665	8668	8671	8675	8678	8681	8684	8688	8691
2650	8694	8698	8701	8704	8707	8711	8714	8717	8721	8724
2660	8727	8730	8734	8737	8740	8743	8747	8750	8753	8757
2670	8760	8763	8766	8770	8773	8776	8780	8783	8786	8789
2680	8793	8796	8799	8803	8806	8809	8812	8816	8819	8822
2690	8825	8829	8832	8835	8839	8842	8845	8848	8852	8855
2700	8858	8862	8865	8868	8871	8875	8878	8881	8885	8888
2710	8891	8894	8898	8901	8904	8908	8911	8914	8917	8921
2720	8924	8927	8930	8934	8937	8940	8944	8947	8950	8953
2730	8957	8960	8963	8967	8970	8973	8976	8980	8983	8986
2740	8990	8993	8996	8999	9003	9006	9009	9012	9016	9019
2750	9022	9026	9029	9032	9035	9039	9042	9045	9049	9052
2760	9055	9058	9062	9065	9068	9072	9075	9078	9081	9085
2770	9088	9091	9095	9098	9101	9104	9108	9111	9114	9117
2780	9121	9124	9127	9131	9134	9137	9140	9144	9147	9150
2790	9154	9157	9160	9163	9167	9170	9173	9177	9180	9183
2800	9186	9190	9193	9196	9200	9203	9206	9209	9213	9216
2810	9219	9222	9226	9229	9232	9236	9239	9242	9245	9249
2820	9252	9255	9259	9262	9265	9268	9272	9275	9278	9282
2830	9285	9288	9291	9295	9298	9301	9304	9308	9311	9314
2840	9318	9321	9324	9327	9331	9334	9337	9341	9344	9347
2850	9350	9354	9357	9360	9364	9367	9370	9373	9377	9380
2860	9383	9387	9390	9393	9396	9400	9403	9406	9409	9413
2870	9416	9419	9423	9426	9429	9432	9436	9439	9442	9446
2880	9449	9452	9455	9459	9462	9465	9469	9472	9475	9478
2890	9482	9485	9488	9492	9495	9498	9501	9505	9508	9511
2900	9514	9518	9521	9524	9528	9531	9534	9537	9541	9544
2910	9547	9551	9554	9557	9560	9564	9567	9570	9574	9577
2920	9580	9583	9587	9590	9593	9596	9600	9603	9606	9610
2930	9613	9616	9619	9623	9626	9629	9633	9636	9639	9642
2940	9646	9649	9652	9656	9659	9662	9665	9669	9672	9675
2950	9679	9682	9685	9688	9692	9695	9698	9701	9705	9708
2960	9711	9715	9718	9721	9724	9728	9731	9734	9738	9741
2970	9744	9747	9751	9754	9757	9761	9764	9767	9770	9774
2980	9777	9780	9783	9787	9790	9793	9797	9800	9803	9806
2990	9810	9813	9816	9820	9823	9826	9829	9833	9836	9839
3000	9843	9846	9849	9852	9856	9859	9862	9866	9869	9872

XXXIII.—METRES TO FEET.

Metres	0	1	2	3	4	5	6	7	8	9
3000	9843	9846	9849	9852	9856	9859	9862	9866	9869	9872
3010	9875	9879	9882	9885	9888	9892	9895	9898	9902	9905
3020	9908	9911	9915	9918	9921	9925	9928	9931	9934	9938
3030	9941	9944	9948	9951	9954	9957	9961	9964	9967	9971
3040	9974	9977	9980	9984	9987	9990	9993	9997	10000	10003
3050	10007	10010	10013	10016	10020	10023	10026	10030	10033	10036
3060	10039	10043	10046	10049	10053	10056	10059	10062	10066	10069
3070	10072	10075	10079	10082	10085	10089	10092	10095	10098	10102
3080	10105	10108	10112	10115	10118	10121	10125	10128	10131	10135
3090	10138	10141	10144	10148	10151	10154	10158	10161	10164	10167
3100	10171	10174	10177	10180	10184	10187	10190	10194	10197	10200
3110	10203	10207	10210	10213	10217	10220	10223	10226	10230	10233
3120	10236	10240	10243	10246	10249	10253	10256	10259	10263	10266
3130	10269	10272	10276	10279	10282	10285	10289	10292	10295	10299
3140	10302	10305	10308	10312	10315	10318	10322	10325	10328	10331
3150	10335	10338	10341	10345	10348	10351	10354	10358	10361	10364
3160	10367	10371	10374	10377	10381	10384	10387	10390	10394	10397
3170	10400	10404	10407	10410	10413	10417	10420	10423	10427	10430
3180	10433	10436	10440	10443	10446	10450	10453	10456	10459	10463
3190	10466	10469	10472	10476	10479	10482	10486	10489	10492	10495
3200	10499	10502	10505	10509	10512	10515	10518	10522	10525	10528
3210	10532	10535	10538	10541	10545	10548	10551	10554	10558	10561
3220	10564	10568	10571	10574	10577	10581	10584	10587	10591	10594
3230	10597	10600	10604	10607	10610	10614	10617	10620	10623	10627
3240	10630	10633	10637	10640	10643	10646	10650	10653	10656	10659
3250	10663	10666	10669	10673	10676	10679	10682	10686	10689	10692
3260	10696	10699	10702	10705	10709	10712	10715	10719	10722	10725
3270	10728	10732	10735	10738	10742	10745	10748	10751	10755	10758
3280	10761	10764	10768	10771	10774	10778	10781	10784	10787	10791
3290	10794	10797	10801	10804	10807	10810	10814	10817	10820	10824
3300	10827	10830	10833	10837	10840	10843	10846	10850	10853	10856
3310	10860	10863	10866	10869	10873	10876	10879	10883	10886	10889
3320	10892	10896	10899	10902	10906	10909	10912	10915	10919	10922
3330	10925	10929	10932	10935	10938	10942	10945	10948	10951	10955
3340	10958	10961	10965	10968	10971	10974	10978	10981	10984	10988
3350	10991	10994	10997	11001	11004	11007	11011	11014	11017	11020
3360	11024	11027	11030	11034	11037	11040	11043	11047	11050	11053
3370	11056	11060	11063	11066	11070	11073	11076	11079	11083	11086
3380	11089	11093	11096	11099	11102	11106	11109	11112	11116	11119
3390	11122	11125	11129	11132	11135	11138	11142	11145	11148	11152
3400	11155	11158	11161	11165	11169	11171	11175	11178	11181	11184
3410	11188	11191	11194	11198	11201	11204	11207	11211	11214	11217
3420	11221	11224	11227	11230	11234	11237	11240	11243	11247	11250
3430	11253	11257	11260	11263	11266	11270	11273	11276	11280	11283
3440	11286	11289	11293	11296	11299	11303	11306	11309	11312	11316
3450	11319	11322	11325	11329	11332	11335	11339	11342	11345	11348
3460	11352	11355	11358	11362	11365	11368	11371	11375	11378	11381
3470	11385	11388	11391	11394	11398	11401	11404	11408	11411	11414
3480	11417	11421	11424	11427	11430	11434	11437	11440	11444	11447
3490	11450	11453	11457	11460	11463	11467	11470	11473	11476	11480
3500	11483	11486	11490	11493	11496	11499	11503	11506	11509	11513

XXXIII.—METRES TO FEET.

Metres	0	1	2	3	4	5	6	7	8	9
3500	11483	11486	11490	11493	11496	11499	11503	11506	11509	11513
3510	11516	11519	11522	11526	11529	11532	11535	11539	11542	11545
3520	11549	11552	11555	11558	11562	11565	11568	11572	11575	11578
3530	11581	11585	11588	11591	11595	11598	11601	11604	11608	11611
3540	11614	11617	11621	11624	11627	11631	11634	11637	11640	11644
3550	11647	11650	11654	11657	11660	11663	11667	11670	11673	11677
3560	11680	11683	11686	11690	11693	11696	11700	11703	11706	11709
3570	11713	11716	11719	11722	11726	11729	11732	11736	11739	11742
3580	11745	11749	11752	11755	11759	11762	11765	11768	11772	11775
3590	11778	11782	11785	11788	11791	11795	11798	11801	11805	11808
3600	11811	11814	11818	11821	11824	11827	11831	11834	11837	11841
3610	11844	11847	11850	11854	11857	11860	11864	11867	11870	11873
3620	11877	11880	11883	11887	11890	11893	11896	11900	11903	11906
3630	11909	11913	11916	11919	11923	11926	11929	11932	11936	11939
3640	11942	11946	11949	11952	11955	11959	11962	11965	11969	11972
3650	11975	11978	11982	11985	11988	11992	11995	11998	12001	12005
3660	12008	12011	12014	12018	12021	12024	12028	12031	12034	12037
3670	12041	12044	12047	12051	12054	12057	12060	12064	12067	12070
3680	12074	12077	12080	12083	12087	12090	12093	12096	12100	12103
3690	12106	12110	12113	12116	12119	12123	12126	12129	12133	12136
3700	12139	12142	12146	12149	12152	12156	12159	12162	12165	12169
3710	12172	12175	12179	12182	12185	12188	12192	12195	12198	12201
3720	12205	12208	12211	12215	12218	12221	12224	12228	12231	12234
3730	12238	12241	12244	12247	12251	12254	12257	12261	12264	12267
3740	12270	12274	12277	12280	12284	12287	12290	12293	12297	12300
3750	12303	12306	12310	12313	12316	12320	12323	12326	12329	12333
3760	12336	12339	12343	12346	12349	12352	12356	12359	12362	12366
3770	12369	12372	12375	12379	12382	12385	12388	12392	12395	12398
3780	12402	12405	12408	12411	12415	12418	12421	12425	12428	12431
3790	12434	12438	12441	12444	12448	12451	12454	12457	12461	12464
3800	12467	12471	12474	12477	12480	12484	12487	12490	12493	12497
3810	12500	12503	12507	12510	12513	12516	12520	12523	12526	12530
3820	12533	12536	12539	12543	12546	12549	12553	12556	12559	12562
3830	12566	12569	12572	12576	12579	12582	12585	12589	12592	12595
3840	12598	12602	12605	12608	12612	12615	12618	12621	12625	12628
3850	12631	12635	12638	12641	12644	12648	12651	12654	12658	12661
3860	12664	12667	12671	12674	12677	12680	12684	12687	12690	12694
3870	12697	12700	12703	12707	12710	12713	12717	12720	12723	12726
3880	12730	12733	12736	12740	12743	12746	12749	12753	12756	12759
3890	12763	12766	12769	12772	12776	12779	12782	12785	12789	12792
3900	12795	12799	12802	12805	12808	12812	12815	12818	12822	12825
3910	12828	12831	12835	12838	12841	12845	12848	12851	12854	12858
3920	12861	12864	12867	12871	12874	12877	12881	12884	12887	12890
3930	12894	12897	12900	12904	12907	12910	12913	12917	12920	12923
3940	12927	12930	12933	12936	12940	12943	12946	12950	12953	12956
3950	12959	12963	12966	12969	12972	12976	12979	12982	12986	12989
3960	12992	12995	12999	13002	13005	13009	13012	13015	13018	13022
3970	13025	13028	13032	13035	13038	13041	13045	13048	13051	13055
3980	13058	13061	13064	13068	13071	13074	13077	13081	13084	13087
3990	13091	13094	13097	13100	13104	13107	13110	13114	13117	13120
4000	13123	13127	13130	13133	13137	13140	13143	13146	13150	13153

TABLE XXXIV.—MILES TO KILOMETRES.

1 mile = 1.60933904 kilometres.

(Original.)

Miles.	0	1.	2	3	4	5	6	7	8	9
0	0	2	3	5	6	8	10	11	13	14
10	16	18	19	21	23	24	26	27	29	31
20	32	34	35	37	39	40	42	43	45	47
30	48	50	51	53	55	56	58	60	61	63
40	64	66	68	69	71	72	74	76	77	79
50	80	82	84	85	87	89	90	92	93	95
60	97	98	100	101	103	105	106	108	109	111
70	113	114	116	117	119	121	122	124	126	127
80	129	130	132	134	135	137	138	140	142	143
90	145	146	148	150	151	153	154	156	158	159
100	161	163	164	166	167	169	171	172	174	175
110	177	179	180	182	183	185	187	188	190	192
120	193	195	196	198	200	201	203	204	206	208
130	209	211	212	214	216	217	219	220	222	224
140	225	227	229	230	232	233	235	237	238	240
150	241	243	245	246	248	249	251	253	254	256
160	257	259	261	262	264	266	267	269	270	272
170	274	275	277	278	280	282	283	285	286	288
180	290	291	293	295	296	298	299	301	303	304
190	306	307	309	311	312	314	315	317	319	320
200	322	323	325	327	328	330	332	333	335	336
210	338	340	341	343	344	346	348	349	351	352
220	354	356	357	359	360	362	364	365	367	369
230	370	372	373	375	377	378	380	381	383	385
240	386	388	389	391	393	394	396	398	399	401
250	402	404	406	407	409	410	412	414	415	417
260	418	420	422	423	425	426	428	430	431	433
270	435	436	438	439	441	443	444	446	447	449
280	451	452	454	455	457	459	460	462	463	465
290	467	468	470	472	473	475	476	478	480	481
300	483	484	486	488	489	491	492	494	496	497
310	499	501	502	504	505	507	509	510	512	513
320	515	517	518	520	521	523	525	526	528	529
330	531	533	534	536	538	539	541	542	544	546
340	547	549	550	552	554	555	557	558	560	562
350	563	565	566	568	570	571	573	575	576	578
360	579	581	583	584	586	587	589	591	592	594
370	595	597	599	600	602	604	605	607	608	610
380	612	613	615	616	618	620	621	623	624	626
390	628	629	631	632	634	636	637	639	641	642
400	644	645	647	649	650	652	653	655	657	658
410	660	661	663	665	666	668	669	671	673	674
420	676	678	679	681	682	684	686	687	689	690
430	692	694	695	697	698	700	702	703	705	706
440	708	710	711	713	715	716	718	719	721	723
450	724	726	727	729	731	732	734	735	737	739
460	740	742	744	745	747	748	750	752	753	755
470	756	758	760	761	763	764	766	768	769	771
480	772	774	776	778	779	781	782	784	785	787
490	789	790	792	793	795	797	798	800	801	803
500	805	806	808	809	811	813	814	816	818	819
510	821	822	824	826	827	829	830	832	834	835
520	837	838	840	842	843	845	847	848	850	851
530	853	855	856	858	859	861	863	864	866	867
540	869	871	872	874	875	877	879	880	882	884
550	885	887	888	890	892	893	895	896	898	900

XXXIV.—MILES TO KILOMETRES.

Miles.	0	1	2	3	4	5	6	7	8	9
550	885	887	888	890	892	893	895	896	898	900
560	901	903	904	906	908	909	911	912	914	916
570	917	919	921	922	924	925	927	929	930	932
580	933	935	937	938	940	941	943	945	946	948
590	950	951	953	954	956	958	959	961	962	964
600	966	967	969	970	972	974	975	977	978	980
610	982	983	985	987	988	990	991	993	995	996
620	998	999	1001	1003	1004	1006	1007	1009	1011	1012
630	1014	1015	1017	1019	1020	1022	1024	1025	1027	1028
640	1030	1032	1033	1035	1036	1038	1040	1041	1043	1044
650	1046	1048	1049	1051	1053	1054	1056	1057	1059	1061
660	1062	1064	1065	1067	1069	1070	1072	1073	1075	1077
670	1078	1080	1081	1083	1085	1086	1088	1090	1091	1093
680	1094	1096	1098	1099	1101	1102	1104	1106	1107	1109
690	1110	1112	1114	1115	1117	1118	1120	1122	1123	1125
700	1127	1128	1130	1131	1133	1135	1136	1138	1139	1141
710	1143	1144	1146	1147	1149	1151	1152	1154	1156	1157
720	1159	1160	1162	1164	1165	1167	1168	1170	1172	1173
730	1175	1176	1178	1180	1181	1183	1184	1186	1188	1189
740	1191	1193	1194	1196	1197	1199	1201	1202	1204	1205
750	1207	1209	1210	1212	1213	1215	1217	1218	1220	1221
760	1223	1225	1226	1228	1230	1231	1233	1234	1236	1238
770	1239	1241	1242	1244	1246	1247	1249	1250	1252	1254
780	1255	1257	1259	1260	1262	1263	1265	1267	1268	1270
790	1271	1273	1275	1276	1278	1279	1281	1283	1284	1286
800	1287	1289	1291	1292	1294	1296	1297	1299	1300	1302
810	1304	1305	1307	1308	1310	1312	1313	1315	1316	1318
820	1320	1321	1323	1324	1326	1328	1329	1331	1333	1334
830	1336	1337	1339	1341	1342	1344	1345	1347	1349	1350
840	1352	1353	1355	1357	1358	1360	1362	1363	1365	1366
850	1368	1370	1371	1373	1374	1376	1378	1379	1381	1382
860	1384	1386	1387	1389	1390	1392	1394	1395	1397	1399
870	1400	1402	1403	1405	1407	1408	1410	1411	1413	1415
880	1416	1418	1419	1421	1423	1424	1426	1427	1429	1431
890	1432	1434	1436	1437	1439	1440	1442	1444	1445	1447
900	1448	1450	1452	1453	1455	1456	1458	1460	1461	1463
910	1464	1466	1468	1469	1471	1473	1474	1476	1477	1479
920	1481	1482	1484	1485	1487	1489	1490	1492	1493	1495
930	1497	1498	1500	1502	1503	1505	1506	1508	1510	1511
940	1513	1514	1516	1518	1519	1521	1522	1524	1526	1527
950	1529	1530	1532	1534	1535	1537	1539	1540	1542	1543
960	1545	1547	1548	1550	1551	1553	1555	1556	1558	1559
970	1561	1563	1564	1566	1567	1569	1571	1572	1574	1576
980	1577	1579	1580	1582	1584	1585	1587	1588	1590	1592
990	1593	1595	1596	1598	1600	1601	1603	1605	1606	1608
1000	1609	1611	1613	1614	1616	1617	1619	1621	1622	1624

	1000	1609	**6000**	9656	**11000**	17703	**16000**	25749	
	2000	3219	**7000**	11265	**12000**	19312	**17000**	27359	
	3000	4828	**8000**	12875	**13000**	20921	**18000**	28968	
	4000	6437	**9000**	14484	**14000**	22531	**19000**	30577	
	5000	8047	**10000**	16093	**15000**	24140	**20000**	32187	

TABLE XXXV.—STATUTE TO NAUTICAL MILES (KNOTS).

1 statute mile = .867554 nautical.

(Original.)

Stat. Miles.	0	1	2	3	4	5	6	7	8	9
0	0.0	0.8	1.7	2.6	3.5	4.3	5.2	6.1	6.9	7.8
10	8.7	9.5	10.4	11.3	12.1	13.0	13.9	14.7	15.6	16.5
20	17.4	18.2	19.1	20.0	20.8	21.7	22.6	23.4	24.3	25.2
30	26.0	26.9	27.8	28.6	29.5	30.4	31.2	32.1	33.0	33.8
40	34.7	35.6	36.4	37.3	38.2	39.0	39.9	40.8	41.6	42.5
50	43.4	44.2	45.1	46.0	46.8	47.7	48.6	49.5	50.3	51.2
60	52.1	52.9	53.8	54.7	55.5	56.4	57.3	58.1	59.0	59.9
70	60.7	61.6	62.5	63.3	64.2	65.1	65.9	66.8	67.7	68.5
80	69.4	70.3	71.1	72.0	72.9	73.7	74.6	75.5	76.3	77.2
90	78.1	78.9	79.8	80.7	81.6	82.4	83.3	84.2	85.0	85.9
100	86.8	87.6	88.5	89.4	90.2	91.1	92.0	92.8	93.7	94.6
110	95.4	96.3	97.2	98.0	98.9	99.8	100.6	101.5	102.4	103.2
120	104.1	105.0	105.8	106.7	107.6	108.4	109.3	110.2	111.0	111.9
130	112.8	113.6	114.5	115.4	116.3	117.1	118.0	118.9	119.7	120.6
140	121.5	122.3	123.2	124.1	124.9	125.8	126.7	127.5	128.4	129.3
150	130.1	131.0	131.9	132.7	133.6	134.5	135.3	136.2	137.1	137.9
160	138.8	139.7	140.5	141.4	142.3	143.1	144.0	144.9	145.7	146.6
170	147.5	148.4	149.2	150.1	151.0	151.8	152.7	153.6	154.4	155.3
180	156.2	157.0	157.9	158.8	159.6	160.5	161.4	162.2	163.1	164.0
190	164.8	165.7	166.6	167.4	168.3	169.2	170.0	170.9	171.8	172.6
200	173.5	174.4	175.2	176.1	177.0	177.8	178.7	179.6	180.5	181.3
210	182.2	183.1	183.9	184.8	185.7	186.5	187.4	188.3	189.1	190.0
220	190.9	191.7	192.6	193.5	194.3	195.2	196.1	196.9	197.8	198.7
230	199.5	200.4	201.3	202.1	203.0	203.9	204.7	205.6	206.5	207.3
240	208.2	209.1	209.9	210.8	211.7	212.6	213.4	214.3	215.2	216.0
250	216.9	217.8	218.6	219.5	220.4	221.2	222.1	223.0	223.8	224.7
260	225.6	226.4	227.3	228.2	229.0	229.9	230.8	231.6	232.5	233.4
270	234.2	235.1	236.0	236.8	237.7	238.6	239.4	240.3	241.2	242.0
280	242.9	243.8	244.7	245.5	246.4	247.3	248.1	249.0	249.9	250.7
290	251.6	252.5	253.3	254.2	255.1	255.9	256.8	257.7	258.5	259.4
300	260.3	261.1	262.0	262.9	263.7	264.6	265.5	266.3	267.2	268.1
310	268.9	269.8	270.7	271.5	272.4	273.3	274.1	275.0	275.9	276.7
320	277.6	278.5	279.4	280.2	281.1	282.0	282.8	283.7	284.6	285.4
330	286.3	287.2	288.0	288.9	289.8	290.6	291.5	292.4	293.2	294.1
340	295.0	295.8	296.7	297.6	298.4	299.3	300.2	301.0	301.9	302.8
350	303.6	304.5	305.4	306.2	307.1	308.0	308.8	309.7	310.6	311.5
360	312.3	313.2	314.1	314.9	315.8	316.7	317.5	318.4	319.3	320.1
370	321.0	321.9	322.7	323.6	324.5	325.3	326.2	327.1	327.9	328.8
380	329.7	330.5	331.4	332.3	333.1	334.0	334.9	335.7	336.6	337.5
390	338.3	339.2	340.1	340.9	341.8	342.7	343.6	344.4	345.3	346.2

400	347.0	**1000**	867.6	**1500**	1301.3	
500	433.8	**1100**	954.3	**1600**	1388.1	
600	520.5	**1200**	1041.1	**1700**	1474.8	
700	607.3	**1300**	1127.8	**1800**	1561.6	
800	694.0	**1400**	1214.6	**1900**	1648.4	
900	780.8			**2000**	1735.1	

TABLE XXXVI.—LENGTH OF A DEGREE IN VARIOUS LATITUDES.

d. (in feet) = 365491 cos. l — 306 cos. 3 l.

(Original. See Davies & Peck. Dict. math. p. 163.)

Lat.	Stat. m.	Naut. m.	Kil.	Lat.	Stat. m.	Naut. m.	Kil.	Lat.	Stat. m.	Naut. m.	Kil.
°				°				°			
0	69.16	60.0	111.3	20	65.02	56.4	104.6	40	53.05	46.0	85.4
1	69.15	60.0	111.3	21	64.59	56.0	103.9	41	52.27	45.3	84.1
2	69.12	59.9	111.2	22	64.15	55.7	103.2	42	51.47	44.7	82.8
3	69.07	59.9	111.1	23	63.70	55.3	102.5	43	50.66	44.0	81.5
4	69.00	59.9	111.0	24	63.22	54.8	101.7	44	49.83	43.2	80.2
5	68.90	59.8	110.9	25	62.72	54.4	100.9	45	48.99	42.5	78.9
6	68.79	59.7	110.7	26	62.20	54.0	100.1	46	48.13	41.7	77.5
7	68.65	59.6	110.5	27	61.66	53.5	99.2	47	47.25	41.0	76.1
8	68.50	59.4	110.2	28	61.11	53.0	98.3	48	46.36	40.2	74.6
9	68.32	59.2	109.9	29	60.54	52.5	97.4	49	45.46	39.4	73.2
10	68.12	59.1	109.6	30	59.94	52.0	96.5	50	44.54	38.6	71.7
11	67.90	58.9	109.3	31	59.33	51.5	95.5	51	43.61	37.8	70.2
12	67.66	58.6	108.9	32	58.71	50.9	94.5	52	42.67	37.0	68.7
13	67.40	58.4	108.5	33	58.06	50.4	93.4	53	41.71	36.2	67.1
14	67.12	58.2	108.0	34	57.40	49.8	92.3	54	40.74	35.3	65.6
15	66.82	58.0	107.5	35	56.72	49.2	91.2	55	39.76	34.5	64.0
16	66.50	57.7	107.0	36	56.01	48.6	90.1	60	34.67	30.1	55.8
17	66.16	57.4	106.5	37	55.30	48.0	89.0	65	29.31	25.4	47.2
18	65.80	57.1	105.9	38	54.57	47.3	87.8	70	23.73	20.6	38.2
19	65.42	56.7	105.3	39	53.82	46.7	86.6	75	17.96	15.6	28.9
20	65.02	56.4	104.6	40	53.05	46.0	85.4	80	12.05	10.4	19.4

XXXVII–XLIII. MISCELLANEOUS TABLES.

TABLE XXXVII.—SUNSPOT NUMBERS.

(Wolf. Astronomische Mittheilungen.)

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1800	7	9	14	10	5	24	21	20	12	12	10	40	15
1	27	29	30	31	32	31	35	39	34	33	40	48	34
2	48	47	41	50	53	55	57	58	65	56	66	64	55
3	66	67	68	69	71	72	73	64	75	76	77	77	71
4	77	75	77	77	77	76	74	72	71	71	67	63	73
1805	61	59	56	46	39	49	47	46	44	43	41	40	48
6	39	30	28	34	26	26	31	29	28	27	25	24	29
7	12	12	10	18	10	10	13	12	6	8	3	0	9
8	0	4	0	12	9	12	7	8	12	5	11	12	8
9	7	9	1	2	2	8	0	0	0	0	0	0	2
1810	0	0	0	0	0	0	0	9	0	0	0	0	0
1	0	0	0	0	0	0	7	0	2	6	1	1	1
2	13	2	1	0	1	1	0	19	5	6	8	10	5
3	0	10	2	17	6	11	16	8	18	30	17	20	13
4	22	12	6	23	6	15	18	2	12	22	14	20	14
1815	19	32	26	32	10	56	35	47	32	33	37	65	35
6	26	69	74	59	44	44	39	28	49	56	38	31	46
7	36	55	107	26	19	40	47	45	36	25	36	24	41
8	35	19	22	36	53	36	28	31	27	33	13	26	30
9	34	21	4	20	18	36	34	26	15	28	25	31	24
1820	13	27	4	18	29	11	23	26	5	9	8	8	15
1	22	2	6	6	1	2	2	5	4	18	4	0	6
2	0	1	16	13	2	6	8	2	0	0	0	0	4
3	0	0	1	0	0	0	0	0	0	0	0	20	2
4	22	11	0	20	3	0	0	1	20	25	0	1	9
1825	5	16	15	0	15	15	31	25	16	14	12	22	16
6	18	18	38	24	32	37	52	40	19	51	38	64	36
7	34	46	56	46	56	57	43	54	50	57	48	46	49
8	53	64	65	61	89	98	54	76	50	35	57	47	62
9	43	49	72	98	68	76	91	77	50	61	67	56	67
1830	50	71	85	107	66	65	44	51	62	84	81	82	71
1	48	50	93	55	38	33	45	55	38	46	44	29	48
2	31	56	55	27	41	27	14	9	8	21	14	28	28
3	11	15	12	3	13	1	7	6	12	8	1	10	9
4	5	18	4	1	9	8	9	4	12	25	30	34	13
1835	8	24	20	62	44	33	60	59	101	95	100	78	57
6	89	108	98	143	111	125	117	108	95	137	121	206	122
7	188	176	135	138	111	158	163	134	96	124	107	130	138
8	145	85	141	127	138	94	108	79	74	91	77	80	103
9	108	102	78	62	54	55	85	131	133	91	69	64	86
1840	81	88	56	66	69	48	61	58	74	50	54	54	63
1	24	30	30	43	67	56	31	39	35	28	20	39	37
2	20	22	22	27	25	20	13	26	18	38	40	18	24
3	13	4	8	8	21	10	10	12	4	5	19	13	11
4	9	15	14	21	12	4	21	24	7	22	11	22	15
1845	26	44	43	57	48	31	31	32	30	41	39	60	40

XXXVII.—SUNSPOT NUMBERS.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1845	26	44	43	57	48	31	31	32	30	41	39	60	40
6	39	51	64	69	60	65	46	55	107	56	60	66	62
7	63	45	86	45	75	85	52	141	161	180	139	110	98
8	159	112	109	107	102	124	139	132	100	132	115	160	124
9	157	131	96	102	81	81	78	61	94	72	100	97	96
1850	78	89	83	44	62	70	39	62	86	71	55	60	67
1	76	105	65	56	63	63	36	57	68	62	51	71	64
2	68	68	61	65	55	47	42	40	38	67	54	45	54
3	41	43	38	48	35	40	46	50	34	42	29	23	39
4	15	20	21	26	24	21	19	16	22	13	28	21	21
1855	12	11	17	4	9	5	0	3	0	10	4	3	7
6	0	5	0	6	0	5	5	6	4	4	8	7	4
7	14	7	5	11	29	16	22	17	42	41	31	37	23
8	39	35	58	38	41	44	57	55	80	91	52	67	55
9	84	88	90	86	91	87	95	107	106	115	97	81	94
1860	82	88	99	71	107	109	117	100	92	90	98	96	96
1	62	78	101	98	57	88	78	82	80	67	54	80	77
2	63	64	44	54	64	84	73	62	67	42	51	41	59
3	48	57	66	41	54	41	33	48	22	40	38	41	44
4	58	47	66	36	41	58	55	55	28	34	58	29	47
1865	49	39	40	29	34	34	27	38	22	17	25	13	31
6	32	38	25	18	13	16	9	13	7	14	9	2	16
7	0	1	9	5	3	2	5	5	10	14	9	25	7
8	16	16	26	37	27	31	29	34	44	62	59	68	37
9	61	59	53	41	104	108	59	80	81	59	77	104	74
1870	77	115	159	160	176	136	132	154	136	146	148	130	139
1	88	125	143	162	146	92	103	110	80	89	105	90	111
2	80	120	88	102	108	110	105	93	115	104	112	84	102
3	87	107	98	76	48	45	67	68	48	47	55	49	66
4	61	64	46	32	45	38	68	61	28	34	29	29	45
1875	15	22	34	29	12	24	12	15	2	13	18	10	17
6	14	15	31	2	5	2	15	9	10	14	10	8	11
7	24	9	12	16	21	13	6	6	16	7	14	2	12
8	3	6	8	0	6	6	0	0	5	1	4	0	3
9	1	1	0	6	2	5	8	11	6	12	13	7	6
1880	24	28	20	19	24	34	22	48	66	43	31	30	32
1	36	53	52	52	44	60	77	58	53	64	55	47	54
2	45	69	68	96	64	45	45	40	58	59	84	42	60
3	61	47	43	82	32	76	81	46	53	84	84	76	64
4	92	87	87	76	66	51	53	56	62	48	37	47	63
1885	43	72	50	55	73	84	66	50	40	39	33	22	52
6	30	26	57	44	31	27	30	17	21	9	0	12	25

TABLE XXXVII.—LOCAL TIME TO STANDARD TIME.

(Original.)

Greenwich noon = 7 A. M. 75th meridian time = time given in this table for each longitude W. For longitude E. from Greenwich subtract the time by this table from 12, and that will give the P. M. local time of Greenwich noon.

West of 75th Meridian.											East of 75th Meridian.				
											Local Time.				
0	1	2	3	4	5	6	0′	15′	30′	45′	7 A. M.	8 A. M.	9 A. M.	10 A. M.	11 A. M.
165°	150°	135°	120°	105°	90°	75°	60m	59m	58m	57m	60°	45°	30°	15°	0°
166	151	136	121	106	91	76	56	55	54	53	61	46	31	16	1
167	152	137	122	107	92	77	52	51	50	49	62	47	32	17	2
168	153	138	123	108	93	78	48	47	46	45	63	48	33	18	3
169	154	139	124	109	94	79	44	43	42	41	64	49	34	19	4
170	155	140	125	110	95	80	40	39	38	37	65	50	35	20	5
171	156	141	126	111	96	81	36	35	34	33	66	51	36	21	6
172	157	142	127	112	97	82	32	31	30	29	67	52	37	22	7
173	158	143	128	113	98	83	28	27	26	25	68	53	38	23	8
174	159	144	129	114	99	84	24	23	22	21	69	54	39	24	9
175	160	145	130	115	100	85	20	19	18	17	70	55	40	25	10
176	161	146	131	116	101	86	16	15	14	13	71	56	41	26	11
177	162	147	132	117	102	87	12	11	10	9	72	57	42	27	12
178	163	148	133	118	103	88	8	7	6	5	73	58	43	28	13
179	164	149	134	119	104	89	4	3	2	1	74	59	44	29	14

EXAMPLE.

To Find Local Time of Greenwich Noon in Longitude 49° 26′ West of Greenwich.

Look for degree of longitude 49 and we find 8 A. M at the head. 26′ of longitude in the center table gives opposite 49°: 42m; hence local time of Greenwich noon in longitude 49° 26′ W. is 8:42 A. M.

To Find Greenwich Time of Local Noon in Longitude 95° 40′ W.

Greenwich noon = 5:37 A. M. Subtract 5:37 from 12, and we have 6:23 P. M., Greenwich time of local noon.

To Find Local Time of Any Greenwich Time.

Find 2:35 P. M. Greenwich time in longitude 111° 35′ W. Greenwich noon = 4:34 A. M. local time. 2:35 P. M. Greenwich time would be 2 hours 35 minutes later, or 7:9 A. M. local time.

To Find Greenwich Time of Any Local Time.

Find Greenwich time of 4:37 P. M. local time in 98° 8′ longitude W. Local time of Greenwich noon = 5:27 A. M.; 4:37 P. M. is 11 hours 10 minutes later, or 11:10 P. M. Greenwich time.

To use this table for any other meridian than Greenwich, substitute for "Greenwich noon" its time at the meridian desired.

Given 7 A. M. Eastern Time, to find its Local Time in Longitude 112° 48′ W.

Over 112 we find 4, and opposite that for 45′ we have 29. Hence 7 A. M. (Eastern) = 4:29 A. M. (local) in longitude 112° 48′ W.

XXXIX.—TIME OF SUNRISE.

TABLE XXXIX.—TIME OF SUNRISE.

(Computed from Schott. Temp. Tables, p. 114.)

	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	40°	42°	44°	46°	48°	50°	52°	54°	56°	58°	60°
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan. 1	6 36	6 40	6 44	6 48	6 52	6 56	7 0	7 5	7 10	7 16	7 22	7 29	7 36	7 43	7 51	8 0	8 10	8 20	8 31	8 45	9 3
Jan. 11	6 38	6 41	6 45	6 49	6 53	6 57	7 1	7 5	7 10	7 16	7 21	7 27	7 33	7 40	7 47	7 55	8 4	8 14	8 25	8 38	8 53
Jan. 21	6 39	6 42	6 45	6 49	6 52	6 56	7 0	7 3	7 7	7 12	7 18	7 23	7 28	7 34	7 41	7 48	7 56	8 4	8 14	8 25	8 38
Feb. 1	6 38	6 42	6 44	6 47	6 50	6 54	6 57	7 1	7 5	7 9	7 13	7 18	7 23	7 28	7 34	7 41	7 48	7 55	8 4	8 14	8 25
Feb. 11	6 36	6 39	6 41	6 44	6 47	6 50	6 52	6 55	6 58	7 1	7 5	7 9	7 14	7 19	7 28	7 36	7 45	7 55	8 4	8 14	8 25
Feb. 21	6 33	6 36	6 39	6 41	6 44	6 47	6 50	6 52	6 55	6 58	7 1	7 5	7 9	7 14	7 19	7 28	7 36	7 45	7 55	8 4	8 14
Mar. 1	6 31	6 34	6 37	6 39	6 42	6 44	6 47	6 50	6 52	6 55	6 58	7 1	7 5	7 9	7 14	7 19	7 28	7 36	7 45	7 55	8 4
Mar. 11	6 28	6 31	6 34	6 36	6 39	6 41	6 44	6 47	6 49	6 52	6 55	6 58	7 1	7 5	7 9	7 14	7 19	7 28	7 36	7 45	7 55
Mar. 21	6 25	6 28	6 31	6 34	6 36	6 39	6 41	6 44	6 46	6 49	6 52	6 55	6 58	7 1	7 5	7 9	7 14	7 19	7 28	7 36	7 45
Apr. 1	6 22	6 25	6 28	6 31	6 34	6 36	6 39	6 41	6 44	6 46	6 49	6 52	6 55	6 58	7 1	7 5	7 9	7 14	7 19	7 28	7 36
Apr. 11	6 20	6 22	6 25	6 28	6 31	6 33	6 36	6 38	6 41	6 44	6 46	6 49	6 52	6 55	6 58	7 1	7 5	7 9	7 14	7 19	7 28
Apr. 21	6 17	6 20	6 22	6 25	6 28	6 30	6 33	6 35	6 38	6 41	6 43	6 46	6 49	6 52	6 55	6 58	7 1	7 5	7 9	7 14	7 19
May 1	6 14	6 17	6 20	6 22	6 25	6 27	6 30	6 32	6 35	6 38	6 40	6 43	6 46	6 49	6 52	6 55	6 58	7 1	7 5	7 9	7 14
May 11	6 11	6 14	6 17	6 19	6 22	6 24	6 27	6 29	6 32	6 35	6 37	6 40	6 43	6 46	6 49	6 52	6 55	6 58	7 1	7 5	7 9
May 21	6 9	6 11	6 14	6 16	6 19	6 21	6 24	6 26	6 29	6 31	6 34	6 37	6 40	6 43	6 46	6 49	6 52	6 55	6 58	7 1	7 5
June 1	6 7	6 9	6 11	6 14	6 16	6 18	6 21	6 23	6 26	6 28	6 31	6 34	6 37	6 40	6 43	6 46	6 49	6 52	6 55	6 58	7 1
June 11	6 6	6 7	6 9	6 11	6 13	6 15	6 18	6 20	6 23	6 25	6 28	6 31	6 34	6 37	6 40	6 43	6 46	6 49	6 52	6 55	6 58
June 21	6 6	6 6	6 8	6 10	6 12	6 14	6 17	6 19	6 22	6 24	6 27	6 30	6 33	6 36	6 39	6 42	6 45	6 48	6 51	6 55	6 59
July 1	6 6	6 7	6 9	6 11	6 13	6 15	6 18	6 20	6 23	6 25	6 28	6 31	6 34	6 37	6 40	6 43	6 46	6 49	6 52	6 55	6 59
July 11	6 8	6 9	6 11	6 13	6 15	6 17	6 20	6 22	6 25	6 27	6 30	6 33	6 36	6 39	6 42	6 45	6 48	6 51	6 55	6 58	7 2
July 21	6 10	6 11	6 13	6 15	6 17	6 19	6 22	6 24	6 27	6 29	6 32	6 35	6 38	6 41	6 44	6 47	6 50	6 53	6 57	7 0	7 4
Aug. 1	6 13	6 15	6 17	6 19	6 21	6 23	6 26	6 28	6 31	6 33	6 36	6 39	6 42	6 45	6 48	6 51	6 54	6 57	7 0	7 4	7 8
Aug. 11	6 16	6 18	6 20	6 22	6 24	6 26	6 29	6 31	6 34	6 36	6 39	6 42	6 45	6 48	6 51	6 54	6 57	7 0	7 4	7 8	7 12
Aug. 21	6 19	6 21	6 23	6 25	6 27	6 29	6 32	6 34	6 37	6 39	6 42	6 45	6 48	6 51	6 54	6 57	7 0	7 4	7 8	7 12	7 17
Sept. 1	6 22	6 24	6 26	6 28	6 30	6 32	6 35	6 37	6 40	6 42	6 45	6 48	6 51	6 54	6 57	7 0	7 4	7 8	7 12	7 17	7 22
Sept. 11	6 25	6 27	6 29	6 31	6 33	6 35	6 38	6 40	6 43	6 45	6 48	6 51	6 54	6 57	7 0	7 4	7 8	7 12	7 17	7 22	7 28
Sept. 21	6 28	6 30	6 32	6 34	6 36	6 38	6 41	6 43	6 46	6 48	6 51	6 54	6 57	7 0	7 4	7 8	7 12	7 17	7 22	7 28	7 35
Oct. 1	6 31	6 33	6 35	6 37	6 39	6 41	6 44	6 46	6 49	6 51	6 54	6 57	7 0	7 4	7 8	7 12	7 17	7 22	7 28	7 35	7 43
Oct. 11	6 34	6 36	6 38	6 40	6 42	6 44	6 47	6 49	6 52	6 54	6 57	7 0	7 4	7 8	7 12	7 17	7 22	7 28	7 35	7 43	7 52
Oct. 21	6 37	6 39	6 41	6 43	6 45	6 47	6 50	6 52	6 55	6 57	7 0	7 4	7 8	7 12	7 17	7 22	7 28	7 35	7 43	7 52	8 2
Nov. 1	6 40	6 42	6 44	6 46	6 48	6 50	6 53	6 55	6 58	7 0	7 4	7 8	7 12	7 17	7 22	7 28	7 35	7 43	7 52	8 2	8 13
Nov. 11	6 43	6 45	6 47	6 49	6 51	6 53	6 56	6 58	7 1	7 4	7 8	7 12	7 17	7 22	7 28	7 35	7 43	7 52	8 2	8 13	8 25
Nov. 21	6 46	6 48	6 50	6 52	6 54	6 56	6 59	7 1	7 4	7 7	7 11	7 15	7 20	7 25	7 31	7 38	7 46	7 55	8 5	8 16	8 28
Dec. 1	6 49	6 51	6 53	6 55	6 57	6 59	7 2	7 4	7 7	7 10	7 13	7 17	7 21	7 26	7 32	7 39	7 47	7 56	8 5	8 16	8 28
Dec. 11	6 51	6 53	6 55	6 57	6 59	7 1	7 3	7 6	7 8	7 11	7 14	7 18	7 22	7 27	7 33	7 40	7 48	7 57	8 7	8 18	8 30
Dec. 21	6 52	6 54	6 56	6 58	7 0	7 2	7 4	7 7	7 9	7 12	7 15	7 18	7 22	7 27	7 33	7 40	7 48	7 57	8 7	8 18	8 30

TABLE XL.

TO DETERMINE THE POSITION OF A POINT ON A MAP.

INTRODUCTION.

This table is designed to facilitate the determination to minutes of arc, of positions on a map with lines of latitude and longitude, having given the shortest distances on the map from the point to the nearest parallel and meridian. For use, first measure on any convenient scale the distance between any two lines of latitude or longitude. If no figure at the top of the table coincides with this distance, it may be multiplied or divided by any number to bring it within the range of the table. Then measure the distance on the same scale from the point to the line of latitude or longitude and find the same number multiplied or divided as above, if necessary, in the left-hand column. The intersection of lines from these two numbers will give the minutes of latitude or longitude on the map.

EXAMPLE.

Let distance between two meridians be 46$^{mm.}$, and that from a point to the nearest meridian 20$^{mm.}$; the minutes of longitude are 26.

TABLE XL.—TO DETERMINE THE POSITION OF A POINT ON A MAP.

(Original.)

Horizontal argument is the distance between two parallels or meridians on any scale.
Vertical argument is the distance from the point to the nearest parallel or meridian.

	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70
1	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	5	4	4	4	4	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2
3	7	6	6	6	5	5	5	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3
4	9	9	8	8	7	7	6	6	6	5	5	5	5	5	4	4	4	4	4	4	4	4	3
5	12	11	10	10	9	8	8	7	7	7	7	6	6	6	6	5	5	5	5	5	5	4	4
6	14	13	12	11	11	10	9	9	9	8	8	7	7	7	7	6	6	6	6	6	5	5	5
7	16	15	14	13	12	12	11	10	10	10	9	9	8	8	8	7	7	7	7	7	6	6	6
8	19	17	16	15	14	13	12	12	11	11	10	10	10	9	9	9	8	8	8	8	7	7	7
9	21	19	18	17	16	15	14	13	13	12	12	11	11	10	10	10	9	9	9	8	8	8	8
10	23	22	20	19	18	17	16	15	14	14	13	13	12	12	11	11	10	10	10	9	9	9	9
11	26	24	22	21	19	18	17	16	16	15	14	14	13	13	12	12	11	11	11	10	10	10	9
12	28	26	24	23	21	20	19	18	17	16	16	15	14	14	13	13	12	12	12	11	11	11	10
13	30	28	26	25	23	22	21	20	19	18	17	16	16	15	14	14	13	13	13	12	12	11	11
14		30	28	26	25	23	22	21	20	19	18	17	17	16	16	15	14	14	14	13	13	12	12
15			30	28	26	25	24	22	21	20	20	19	18	17	17	16	16	15	15	14	14	13	13
16				30	28	27	25	24	23	22	21	20	19	18	18	17	17	16	15	15	15	14	14
17					30	28	27	25	24	23	22	21	20	19	19	18	18	17	16	16	15	15	15
18						30	28	27	26	25	23	22	22	21	20	19	19	18	17	17	16	16	15
19							30	28	27	26	25	24	23	22	21	20	20	19	18	18	17	17	16
20								30	29	27	26	25	24	23	22	21	21	20	19	19	18	18	17
21									30	29	27	26	25	24	23	22	22	21	20	20	19	19	18
22										30	29	27	26	25	24	24	23	22	21	21	20	19	19
23											30	29	28	27	26	25	24	23	22	22	21	20	20
24												30	29	28	27	26	25	24	23	22	22	21	21
25													30	29	28	27	26	25	24	23	23	22	21
26														30	29	28	27	26	25	24	24	23	22
27															30	29	28	27	26	25	25	24	23
28																30	29	28	27	26	25	25	24
29																	30	29	28	27	26	26	25
30																		30	29	28	27	26	26
31																			30	29	28	27	27
32																				30	29	28	27
33																					30	29	28
34																						30	29
35																							30

TABLES XLI–XLIII.

DIVISION TABLES.

Introduction.

These tables are designed to facilitate division by 28, 29 and 31: divisors of frequent use in meteorological reductions.

The horizontal rows of figures lettered "D" in plain and bold-faced type are respectively the first three and last two figures of the dividend. The corresponding numbers in the horizontal rows lettered "Q" are respectively the hundreds, tens and units figures of the quotient.

EXAMPLE. TABLE XLII

To divide 22883 by 28:

Under 228 in the horizontal rows (D) we find 8, and under 76, the number nearest to 83, in bold-faced type, we find 17.

Hence the quotient is $817\frac{17}{28}$.

TABLE XLI.—DIVIDING BY 29.

(Original.)

D.	0	29	58	87	116	145	174	203	232	261	D.	**00**	**29**	**58**	**87**	**16**
Q.	0	100	200	300	400	500	600	700	800	900	Q.	00	01	02	03	04
D.	1	30	59	88	117	146	175	204	233	262	D.	**16**	**45**	**74**		**03**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	04	05	06		07
D.	2	31	60	89	118	147	176	205	234	263	D.	**03**	**32**	**61**	**90**	**19**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	07	08	09	10	11
D.	3	32	61	90	119	148	177	206	235	264	D.	**19**	**48**	**77**		**06**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	11	12	13		14
D.	4	33	62	91	120	149	178	207	236	265	D.	**06**	**35**	**64**	**93**	**22**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	14	15	16	17	18
D.	5	34	63	92	121	150	179	208	237	266	D.	**22**	**51**	**80**		**09**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	18	19	20		21
D.	6	35	64	93	122	151	180	209	238	267	D.	**09**	**38**	**67**	**96**	**25**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	21	22	23	24	25
D.	7	36	65	94	123	152	181	210	239	268	D.	**25**	**54**	**83**		**12**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	25	26	27		28
D.	8	37	66	95	124	153	182	211	240	269	D.	**12**	**41**	**70**	**99**	**28**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	28	29	30	31	32
D.	9	38	67	96	125	154	183	212	241	270	D.	**28**	**57**	**86**		**15**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	32	33	34		35
D.	10	39	68	97	126	155	184	213	242	271	D.	**15**	**44**	**73**		**02**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	35	36	37		38
D.	11	40	69	98	127	156	185	214	243	272	D.	**02**	**31**	**60**	**89**	**18**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	38	39	40	41	42
D.	12	41	70	99	128	157	186	215	244	273	D.	**18**	**47**	**76**		**05**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	42	43	44		45
D.	13	42	71	100	129	158	187	216	245	274	D.	**05**	**34**	**63**	**92**	**21**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	45	46	47	48	49
D.	14	43	72	101	130	159	188	217	246	275	D.	**21**	**50**	**79**		**08**
Q.	0	1	2	3	4	5	6	7	8	9	Q	49	50	51		52
D.	15	44	73	102	131	160	189	218	247	276	D	**08**	**37**	**66**	**95**	**24**
Q	0	1	2	3	4	5	6	7	8	9	Q.	52	53	54	55	56
D.	16	45	74	103	132	161	190	219	248	277	D.	**24**	**53**	**82**		**11**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	56	57	58		59
D.	17	46	75	104	133	162	191	220	249	278	D.	**11**	**40**	**69**	**98**	**27**
Q	0	1	2	3	4	5	6	7	8	9	Q	59	60	61	62	63
D.	18	47	76	105	134	163	192	221	250	279	D.	**27**	**56**	**85**		**14**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	63	64	65		66
D.	19	48	77	106	135	164	193	222	251	280	D	**14**	**43**	**72**		**01**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	66	67	68		69
D.	20	49	78	107	136	165	194	223	252	281	D.	**01**	**30**	**59**	**88**	**17**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	69	70	71	72	73
D.	21	50	79	108	137	166	195	224	253	282	D.	**17**	**46**	**75**		**04**
Q	0	1	2	3	4	5	6	7	8	9	Q.	73	74	75		76
D.	22	51	80	109	138	167	196	225	254	283	D.	**04**	**33**	**62**	**91**	**20**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	76	77	78	79	80
D.	23	52	81	110	139	168	197	226	255	284	D	**20**	**49**	**78**		**07**
Q.	0	1	2	3	4	5	6	7	8	9	Q	80	81	82		83
D.	24	53	82	111	140	169	198	227	256	285	D.	**07**	**36**	**65**	**94**	**23**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	83	84	85	86	87
D.	25	54	83	112	141	170	199	228	257	286	D.	**23**	**52**	**81**		**10**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	87	88	89		90
D.	26	55	84	113	142	171	200	229	258	287	D.	**10**	**39**	**68**	**97**	**26**
Q.	0	1	2	3	4	5	6	7	8	9	Q	90	91	92	93	94
D.	27	56	85	114	143	172	201	230	259	288	D.	**26**	**55**	**84**		**13**
Q	0	1	2	3	4	5	6	7	8	9	Q	94	95	96		97
D.	28	57	86	115	144	173	202	231	260	289	D.	**13**	**42**	**71**		
Q.	0	1	2	3	4	5	6	7	8	9	Q	97	98	99		

TABLE XLII.—DIVIDING BY 28.

(Original.)

D.	0	28	56	84	112	140	168	196	224	252	D.	**00**	**28**	**56**	**84**	**12**
Q.	0	100	200	300	400	500	600	700	800	900	Q	00	01	02	03	04
D.	1	29	57	85	113	141	169	197	225	253	D.	**12**	**40**	**68**	**96**	**24**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	04	05	06	07	08
D.	2	30	58	86	114	142	170	198	226	254	D.	**24**	**52**	**80**		**08**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	08	09	10		11
D.	3	31	59	87	115	143	171	199	227	255	D.	**08**	**36**	**64**	**92**	**20**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	11	12	13	14	15
D.	4	32	60	88	116	144	172	200	228	256	D.	**20**	**48**	**76**		**04**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	15	16	17		18
D.	5	33	61	89	117	145	173	201	229	257	D.	**04**	**32**	**60**	**88**	**16**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	18	19	20	21	22
D.	6	34	62	90	118	146	174	202	230	258	D.	**16**	**44**	**72**		**00**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	22	23	24		25
D.	7	35	63	91	119	147	175	203	231	259	D.	**00**	**28**	**56**	**84**	**12**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	25	26	27	28	29
D.	8	36	64	92	120	148	176	204	232	260	D.	**12**	**40**	**68**	**96**	**24**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	29	30	31	32	33
D.	9	37	65	93	121	149	177	205	233	261	D.	**24**	**52**	**80**		**08**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	33	34	35		36
D.	10	38	66	94	122	150	178	206	234	262	D.	**08**	**36**	**64**	**92**	**20**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	36	37	38	39	40
D.	11	39	67	95	123	151	179	207	235	263	D.	**20**	**48**	**76**		**04**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	40	41	42		43
D.	12	40	68	96	124	152	180	208	236	264	D.	**04**	**32**	**60**	**88**	**16**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	43	44	45	46	47
D.	13	41	69	97	125	153	181	209	237	265	D.	**16**	**44**	**72**		**00**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	47	48	49		50
D.	14	42	70	98	126	154	182	210	238	266	D.	**00**	**28**	**56**	**84**	**12**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	50	51	52	53	54
D.	15	43	71	99	127	155	183	211	239	267	D.	**12**	**40**	**68**	**96**	**24**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	54	55	56	57	58
D.	16	44	72	100	128	156	184	212	240	268	D.	**24**	**52**	**80**		**08**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	58	59	60		61
D.	17	45	73	101	129	157	185	213	241	269	D.	**08**	**36**	**64**	**92**	**20**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	61	62	63	64	65
D.	18	46	74	102	130	158	186	214	242	270	D.	**20**	**48**	**76**		**04**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	65	66	67		68
D.	19	47	75	103	131	159	187	215	243	271	D.	**04**	**32**	**60**	**88**	**16**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	68	69	70	71	72
D.	20	48	76	104	132	160	188	216	244	272	D.	**16**	**44**	**72**		**00**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	72	73	74		75
D.	21	49	77	105	133	161	189	217	245	273	D.	**00**	**28**	**56**	**84**	**12**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	75	76	77	78	79
D.	22	50	78	106	134	162	190	218	246	274	D.	**12**	**40**	**68**	**96**	**24**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	79	80	81	82	83
D.	23	51	79	107	135	163	191	219	247	275	D.	**24**	**52**	**80**		**08**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	83	84	85		86
D.	24	52	80	108	136	164	192	220	248	276	D.	**08**	**36**	**64**	**92**	**20**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	86	87	88	89	90
D.	25	53	81	109	137	165	193	221	249	277	D.	**20**	**48**	**76**		**04**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	90	91	92		93
D.	26	54	82	110	138	166	194	222	250	278	D.	**04**	**32**	**60**	**88**	**16**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	93	94	95	96	97
D.	27	55	83	111	139	167	195	223	251	279	D.	**16**	**44**	**72**		**00**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	97	98	99		100

XLIII.—DIVIDING BY 31.

D.	0	31	62	93	124	155	186	217	248	279	D.	**00**	**31**	**62**	**93**	**24**
Q.	0	100	200	300	400	500	600	700	800	900	Q.	00	01	02	03	04
D.	1	32	63	94	125	156	187	218	249	280	D.	**24**	**55**	**86**		**17**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	04	05	06		07
D.	2	33	64	95	126	157	188	219	250	281	D.	**17**	**48**	**79**		**10**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	07	08	09		10
D.	3	34	65	96	127	158	189	220	251	282	D.	**10**	**41**	**72**		**03**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	10	11	12		13
D.	4	35	66	97	128	159	190	221	252	283	D.	**03**	**34**	**65**	**96**	**27**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	13	14	15	16	17
D.	5	36	67	98	129	160	191	222	253	284	D.	**27**	**58**	**89**		**20**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	17	18	19		20
D.	6	37	68	99	130	161	192	223	254	285	D.	**20**	**51**	**82**		**13**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	20	21	22		23
D.	7	38	69	100	131	162	193	224	255	286	D.	**13**	**44**	**75**		**06**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	23	24	25		26
D.	8	39	70	101	132	163	194	225	256	287	D.	**06**	**37**	**68**	**99**	**30**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	26	27	28	29	30
D.	9	40	71	102	133	164	195	226	257	288	D.	**30**	**61**	**92**		**23**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	30	31	32		33
D.	10	41	72	103	134	165	196	227	258	289	D.	**23**	**54**	**85**		**16**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	33	34	35		36
D.	11	42	73	104	135	166	197	228	259	290	D.	**16**	**47**	**78**		**09**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	36	37	38		39
D.	12	43	74	105	136	167	198	229	260	291	D.	**09**	**40**	**71**		**02**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	39	40	41		42
D.	13	44	75	106	137	168	199	230	261	292	D.	**02**	**33**	**64**	**95**	**26**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	42	43	44	45	46
D.	14	45	76	107	138	169	200	231	262	293	D.	**26**	**57**	**88**		**19**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	46	47	48		49
D.	15	46	77	108	139	170	201	232	263	294	D.	**19**	**50**	**81**		**12**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	49	50	51		52
D.	16	47	78	109	140	171	202	233	264	295	D.	**12**	**43**	**74**		**05**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	52	53	54		55
D.	17	48	79	110	141	172	203	234	265	296	D.	**05**	**36**	**67**	**98**	**29**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	55	56	57	58	59
D.	18	49	80	111	142	173	204	235	266	297	D.	**29**	**60**	**91**		**22**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	59	60	61		62
D.	19	50	81	112	143	174	205	236	267	298	D.	**22**	**53**	**84**		**15**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	62	63	64		65
D.	20	51	82	113	144	175	206	237	268	299	D.	**15**	**46**	**77**		**08**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	65	66	67		68
D.	21	52	83	114	145	176	207	238	269	300	D.	**08**	**39**	**70**		**01**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	68	69	70		71
D.	22	53	84	115	146	177	208	239	270	301	D.	**01**	**32**	**63**	**94**	**25**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	71	72	73	74	75
D.	23	54	85	116	147	178	209	240	271	302	D.	**25**	**56**	**87**		**18**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	75	76	77		78
D.	24	55	86	117	148	179	210	241	272	303	D.	**18**	**49**	**80**		**11**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	78	79	80		81
D.	25	56	87	118	149	180	211	242	273	304	D.	**11**	**42**	**73**		**04**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	81	82	83		84
D.	26	57	88	119	150	181	212	243	274	305	D	**04**	**35**	**66**	**97**	**28**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	84	85	86	87	88
D.	27	58	89	120	151	182	213	244	275	306	D.	**28**	**59**	**90**		**21**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	88	89	90		91
D.	28	59	90	121	152	183	214	245	276	307	D.	**21**	**52**	**83**		**14**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	91	92	93		94
D.	29	60	91	122	153	184	215	246	277	308	D.	**14**	**45**	**76**		**07**
Q.	0	1	2	3	4	5	6	7	8	9	Q.	94	95	96		97
D.	30	61	92	123	154	185	216	247	278	309	D.	**07**	**38**	**69**		
Q.	0	1	2	3	4	5	6	7	8	9	Q.	97	98	99		

TABLE XLIV.—MONTHLY NORMAL PRESSURE (15 YEARS) AND TEMPERATURE (8 YEARS).

Station.	Latitude.	Longitude.	Height.	January.			Feb.			March.			April.			May.			June.		
				Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.
				Ob.	Re.		Ob	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.	
	° ′	° ′				°			°			°			°			°			°
Abilene	32 14	99 45	1748	8.30	0.20	41	.26	.13	48	.21	.05	56	.14	.96	64	.13	.92	72	.15	.92	80
Albany	42 39	73 45	85	0.01	0.10	24	.99	.08	26	.90	.99	32	.87	.96	47	.89	.98	61	.87	.95	69
Alpena	45 5	83 30	609	9.35	0.06	16	.36	.07	17	.32	.02	22	.32	.00	36	.31	.97	50	.29	.94	59
Apache	33 48	109 57	5050	5.03	0.16	34	.02	.11	39	.04	.08	45	.98	.98	50	.99	.92	58	.02	.87	68
Assinaboine	48 32	109 42	2690	7.12	0.15	10	.16	.16	15	.13	.05	30	.12	.97	42	.12	.91	54	.11	.86	63
Atlanta	33 45	84 23	1129	8.98	0.21	42	.96	.18	48	.89	.10	52	.85	.04	61	.87	.05	69	.89	.05	75
Atlantic City	39 22	74 25	34	0.10	0.13	32	.07	.10	34	.07	.00	37	.94	.97	47	.98	.01	57	.96	.99	67
Augusta	33 28	81 54	183	0.00	0.20	46	.97	.17	52	.89	.09	55	.84	.03	64	.84	.03	72	.85	.04	78
Baltimore	39 18	76 37	45	0.11	0.16	34	.09	.14	37	.98	.03	41	.95	.00	53	.97	.02	65	.95	.00	73
Benton	47 50	110 40	2681	7.12	0.14	11	.16	.14	20	.17	.07	31	.19	.02	44	.15	.94	55	.15	.89	63
Bismarck	46 47	100 38	1681	8.22	0.19	2	.22	.16	9	.21	.10	23	.15	.97	40	.12	.89	56	.12	.86	65
Block Island	41 10	71 36	26	0.06	0.09	32	.04	.07	32	.93	.96	35	.92	.95	44	.97	.00	53	.96	.99	63
Boise City	43 37	116 8	2750	7.25	0.24	29	.22	.19	33	.18	.09	42	.13	.01	49	.12	.95	58	.11	.90	66
Boston	42 21	71 4	125	9.93	0.07	26	.91	.05	29	.81	.95	33	80	.93	45	.85	.98	56	.83	.96	65
Brownsville	25 53	97 26	57	0.09	0.15	57	.03	.09	62	.97	.03	68	.89	.95	74	.88	.94	78	.89	.95	82
Buffalo	42 53	78 53	690	9.30	0.09	23	.30	.08	24	.23	.00	28	.22	.98	41	.24	.98	54	.23	.96	64
Buford	48 0	103 56	1900	7.96	0.17	2	.98	.17	8	.96	.08	24	.92	.97	41	.89	.89	55	.87	.84	65
Cairo	37 0	89 10	344	9.78	0.17	34	.74	.12	40	.67	.04	47	.60	.97	59	.60	.96	68	.61	.97	75
Cedar Keys	29 8	83 2	22	0.16	0.18	56	.13	.15	61	.08	.10	63	.03	.05	69	.00	.02	75	.02	.04	80
Charleston	32 47	79 56	52	0.13	0.18	50	.10	.15	54	.02	.07	57	.98	.03	64	.98	.03	73	.99	.04	79
Charlotte	35 13	80 51	808	9.29	0.18	40	.27	.15	46	.18	.05	49	.16	.01	59	.18	.02	69	.19	.03	75
Chattanooga	35 4	85 15	772	9.35	0.19	40	.32	.15	46	.25	.08	50	.20	.02	60	.21	.02	68	.23	.04	75
Cheyenne	41 8	104 48	6105	3.89	0.19	25	.89	.17	26	.92	.08	34	.93	.01	40	.97	.92	50	.04	.86	61
Chicago	41 52	87 38	715	9.31	0.11	23	.30	.09	28	.25	.04	34	.21	.98	46	.21	.97	57	.20	.95	66
Cincinnati	39 6	84 30	628	9.46	0.17	32	.44	.14	37	.36	.06	42	.32	.00	54	.33	.99	66	.33	.99	73
Cleveland	41 30	81 42	690	9.33	0.11	25	.33	.10	28	.26	.04	32	.24	.00	45	.26	.00	58	.25	.98	67
Columbus	39 58	83 0	812	9.24	0.15	28	.22	.12	33	.15	.04	38	.12	.99	51	.14	.99	63	.14	.98	70
Corpus Christi	27 49	97 25	20	0.15	0.17	51	.09	.11	58	.03	.05	64	.96	.98	70	.95	.97	76	.96	.98	82
Custer	45 42	107 34	3040	6.79	0.16	14	.82	.16	19	.80	.06	33	.78	.97	45	.78	.91	55	.77	.85	64
Davenport	41 30	90 38	615	9.45	0.15	20	.42	.11	26	.37	.06	35	.31	.98	50	.31	.97	62	.30	.95	70
Davis	30 38	103 56	4928	5.21	0.19	43	.20	.14	48	.17	.06	54	.15	.00	60	.17	.95	68	.21	.94	75
Deadwood	44 23	103 43	4600	5.25	0.18	20	.26	.17	22	.30	.10	31	.30	.01	39	.33	.93	50	.37	.88	60
Denver	39 45	105 0	5281	4.67	0.19	29	.66	.16	31	.66	.06	39	.66	.98	47	.70	.92	56	.74	.84	67
Des Moines	41 35	93 37	866	9.19	0.18	17	.16	.13	24	.11	.06	35	.04	.96	50	.04	.94	62	.03	.92	70
Detroit	42 20	83 3	662	9.35	0.10	25	.34	.08	28	.28	.02	34	.27	.99	46	.28	.99	59	.26	.96	67
Dodge City	37 45	100 0	2524	7.43	0.20	24	.40	.14	31	.37	.05	42	.31	.94	53	.32	.91	62	.34	.88	73
Dubuque	42 30	90 44	665	9.37	0.13	16	.35	.10	23	.30	.04	32	.25	.97	48	.25	.96	60	.24	.94	69
Duluth	46 48	92 6	672	9.32	0.11	7	.32	.09	13	.29	.05	23	.26	.00	37	.23	.96	49	.20	.92	58
Eastport	44 54	66 59	53	9.94	0.00	20	.90	.96	22	.82	.88	27	.83	.89	38	.90	.96	47	.87	.93	56
Elliott	35 30	100 21	2650	7.28	0.18	31	.25	.12	36	.23	.05	46	.17	.94	56	.18	.91	64	.20	.90	73
El Paso	31 47	106 30	3796	6.28	0.17	44	.26	.12	49	.22	.03	56	.19	.97	63	.18	.89	72	.19	.86	80
Erie	42 7	80 5	681	9.33	0.10	26	.32	.08	28	.25	.01	31	.24	.98	44	.26	.98	58	.25	.96	66
Escanaba	45 48	87 5	608	9.35	0.06	12	.36	.06	14	.33	.02	21	.31	.98	36	.30	.96	50	.27	.92	61
Fort Smith	35 22	94 24	470	9.65	0.18	35	.60	.12	42	.53	.04	51	.45	.95	61	.45	.94	69	.47	.95	76
Galveston	29 18	94 47	44	0.12	0.16	52	.07	.11	58	.01	.05	63	.95	.99	70	.94	.98	76	.95	.99	82
Grand Haven	43 5	86 18	620	9.37	0.07	24	.37	.07	25	.33	.02	30	.30	.98	44	.30	.96	56	.29	.95	64
Grant	32 39	109 57	4860	5.22	0.16	42	.22	.14	45	.20	.07	51	.17	.99	57	.18	.93	66	.21	.89	75
Hatteras	35 15	75 40	11	0.15	0 16	45	.12	.13	48	.03	.04	49	.99	.00	57	.02	.03	67	.02	.03	74
Helena	46 34	112 4	4069	5.75	0.12	19	.80	.15	21	.80	.06	34	.80	.00	42	.80	.93	52	.82	.90	60
Huron	44 21	98 9	1307	8.68	0.21	7	.66	.17	13	.64	.10	28	.56	.98	44	.54	.93	57	.53	.90	67
Indianapolis	39 46	86 10	766	9.29	0.16	27	.27	.12	33	.20	.94	39	.16	.99	52	.18	.00	61	.18	.99	72
Jacksonville	30 20	81 39	43	0.14	0.18	55	.11	.15	60	.05	.99	62	.00	.04	69	.98	.02	75	.00	.01	80
Keokuk	40 22	91 26	618	9.45	0.15	22	.42	.11	28	.36	.04	38	.29	.96	52	.29	.95	64	.29	.94	72
Key West	24 34	81 49	22	0.12	0.14	70	.10	.12	72	.08	.10	73	.02	.04	76	.99	.01	80	.02	.01	83
Knoxville	35 56	83 58	970	9.13	0 20	38	.10	.16	44	.03	.09	47	.99	.02	58	.01	.03	67	.03	.03	73
La Crosse	43 49	91 15	744	9.28	0.13	14	.26	.10	20	.22	.04	30	.16	.96	48	.15	.94	61	.14	.92	69
Las Animas	38 4	103 12	3899	6.03	0.21	22	.00	.14	29	.99	.05	40	.95	.94	50	.99	.91	60	.01	.86	71
Leavenworth	39 19	94 57	842	9.25	0.20	24	.20	.14	30	.15	.07	41	.07	.96	54	.06	.94	65	.07	.94	73
Little Rock	34 45	92 6	309	9.85	0.20	40	.80	.14	46	.74	.08	53	.66	.99	63	.65	.98	70	.66	.98	77
Los Angeles	34 3	118 15	339	9.72	0.09	53	.71	.08	54	.69	.05	56	.65	.01	57	.60	.96	62	.58	.94	66

MONTHLY NORMAL PRESSURE (15 YEARS) AND TEMPERATURE (8 YEARS).

Station.	July.			August.			Sept.			October.			Nov.			Dec.			Year.		
	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.
	Ob.	Re.		Ob	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.	
			°			°			°			°			°			°			°
Abilene	8.19	9.96	82	.20	.97	80	.23	.01	74	.26	.08	64	.28	.14	52	.29	.18	45	.22	.04	63
Albany	9.85	9.93	73	.91	.99	71	.98	.07	64	.98	.07	52	.98	.07	40	.99	.08	29	.93	.02	49
Alpena	9.30	9.95	65	.34	.99	63	.36	.01	57	.36	.03	46	.33	.02	33	.33	.03	24	.33	.01	40
Apache	5.08	9.90	72	.08	.92	70	.07	.97	63	.06	.03	54	.06	.13	41	.05	.15	37	.04	.02	53
Assinaboine	7.16	9.88	68	.17	.91	65	.17	.96	54	.17	.02	42	.17	.09	29	.17	.15	19	.15	.01	41
Atlanta	8.90	0.07	78	.88	.04	76	.93	.10	72	.95	.14	63	.95	.17	51	.97	.20	44	.92	.11	61
Atlantic City	9.95	9.98	73	.98	.01	72	.05	.08	68	.06	.09	58	.06	.10	45	.08	.11	36	.02	.05	52
Augusta	9.85	0.04	81	.84	.03	79	.89	.08	75	.93	.12	66	.96	.16	54	.99	.19	48	.91	.10	64
Baltimore	9.94	9.98	77	.98	.03	74	.05	.10	69	.06	.11	58	.07	.12	46	.09	.14	37	.02	.07	55
Benton	7.18	9.90	70	.19	.93	68	.18	.97	56	.18	.04	44	.18	.18	29	.19	.17	24	.17	.00	43
Bismarck	8.17	9.90	69	.18	.92	67	.18	.95	56	.18	.00	43	.21	.08	26	.22	.14	12	.18	.01	39
Block Island	9.94	9.97	69	.98	.01	68	.05	.08	64	.08	.11	55	.03	.06	45	.03	.06	36	.00	.03	50
Boise City	7.13	9.89	73	.12	.89	71	.17	.99	60	.23	.11	48	.29	.22	38	.27	.24	33	.18	.05	50
Boston	9.82	9.94	71	.87	.99	68	.94	.07	62	.93	.06	52	.90	.03	41	.91	.05	31	.87	.00	48
Brownsville	9.93	9.99	83	.90	.96	82	.91	.97	79	.98	.04	74	.04	.10	65	.06	.12	61	.96	.02	72
Buffalo	9.23	9.95	69	.27	.99	68	.32	.05	63	.30	.05	51	.28	.04	38	.28	.06	29	.27	.02	46
Buford	7.93	9.88	68	.94	.90	66	.95	.95	54	.96	.01	42	.97	.08	26	.00	.17	12	.94	.00	39
Cairo	9.64	9.90	79	.64	.99	78	.69	.05	71	.72	.09	60	.74	.11	47	.77	.15	38	.69	.06	58
Cedar Keys	0 04	0.06	82	.99	.01	82	.00	.02	79	.03	.05	73	.09	.11	63	.14	.16	57	.06	.08	70
Charleston	9.99	0.04	82	.97	.02	80	.01	.06	76	.05	.10	68	.08	.13	58	.11	.16	52	.04	.09	66
Charlotte	9.20	0.03	79	.19	.02	76	.25	.09	71	.26	.11	62	.27	.14	50	.28	.17	42	.23	.08	60
Chattanooga	9.24	0.04	77	.23	.03	76	.28	.09	71	.31	.13	62	.33	.16	49	.35	.19	41	.28	.10	60
Cheyenne	4.12	9.89	66	.12	.91	64	.09	.97	56	.04	.07	44	.99	.15	34	.93	.17	29	.00	.03	44
Chicago	9.23	9.98	72	.24	.99	71	.28	.04	65	.28	.05	53	.28	.06	39	.29	.08	29	.26	.03	48
Cincinnati	9.35	0.00	77	.36	.02	75	.41	.07	69	.43	.10	58	.43	.12	44	.45	.16	35	.39	.07	55
Cleveland	9.26	9.99	71	.28	.01	69	.33	.07	64	.33	.08	53	.32	.08	39	.32	.09	30	.29	.02	48
Columbus	9.16	0.00	75	.17	.01	72	.22	.06	67	.23	.09	55	.22	.11	41	.23	.14	32	.19	.06	52
Corpus Christi	0.00	0.02	83	.98	.00	82	.99	.01	79	.05	.07	73	.10	.12	62	.12	.14	56	.03	.05	70
Custer	6.84	9.89	71	.83	.88	70	.85	.97	57	.86	.04	46	.86	.12	32	.84	.16	22	.82	.01	44
Davenport	9.34	9.99	75	.35	.00	72	.38	.04	65	.40	.07	53	.41	.09	38	.44	.13	26	.37	.04	49
Davis	5.26	9.99	75	.26	.01	72	.26	.04	68	.27	.12	60	.25	.18	50	.23	.20	45	.22	.07	60
Deadwood	5.44	9.91	65	.44	.91	64	.43	.99	54	.39	.04	44	.35	.14	32	.30	.18	24	.35	.02	42
Denver	4.82	9.87	72	.82	.89	70	.81	.96	62	.78	.06	50	.75	.18	37	.70	.18	33	.73	.01	50
Des Moines	9.08	9.97	74	.09	.98	72	.11	.01	64	.14	.06	52	.15	.10	36	.18	.15	24	.11	.03	48
Detroit	9.28	9.98	72	.31	.01	70	.35	.06	64	.34	.06	53	.33	.06	40	.34	.08	30	.31	.03	49
Dodge City	7.40	9.93	77	.41	.95	74	.42	.99	67	.43	.05	55	.44	.13	39	.44	.18	30	.39	.02	52
Dubuque	9.27	9.97	73	.30	.00	71	.32	.03	63	.33	.05	51	.34	.08	35	.36	.11	24	.31	.03	47
Duluth	9.21	9.92	66	.24	.96	64	.25	.98	55	.26	.00	45	.28	.03	29	.30	.08	16	.26	.00	38
Eastport	9.86	9.92	61	.91	.97	61	.97	.03	56	.95	.01	47	.91	.07	37	.91	.97	26	.90	.96	42
Elliott	7.26	9.94	77	.27	.96	75	.29	.00	68	.29	.06	57	.29	.14	42	.28	.16	34	.25	.03	55
El Paso	6.24	9.91	82	.25	.93	79	.26	.97	72	.27	.05	62	.30	.15	50	.30	.19	45	.25	.03	62
Erie	9.26	9.97	71	.29	.00	69	.34	.06	64	.33	.06	53	.31	.05	40	.31	.07	31	.29	.02	49
Escanaba	9.29	9.93	66	.32	.97	63	.34	.95	57	.34	.01	45	.33	.01	30	.34	.03	21	.32	.99	40
Fort Smith	9.50	9.98	80	.49	.97	79	.53	.02	73	.58	.08	62	.61	.12	48	.63	.16	40	.54	.04	60
Galveston	9.99	0.03	84	.95	.99	83	.96	.00	80	.03	.07	73	.08	.12	62	.10	.14	57	.01	.05	70
Grand Haven	9 32	9.97	68	.34	.99	66	.37	.03	62	.36	.03	50	.35	.03	38	.36	.05	29	.34	.01	47
Grant	5.26	9.92	77	.25	.94	74	.25	.97	70	.24	.02	62	.26	.14	51	.25	.17	45	.23	.03	60
Hatteras	0.02	0.03	78	.01	.02	77	.06	.07	75	.08	.09	66	.10	.11	56	.12	.14	47	.06	.07	61
Helena	5.88	9.91	67	.87	.90	67	.87	.99	55	.86	.06	43	.86	.14	31	.83	.17	23	.83	.03	43
Huron	8.58	9.94	70	.59	.95	68	.61	.00	58	.61	.03	46	.65	.11	29	.68	.19	15	.61	.04	42
Indianapolis	9.21	0.01	76	.22	.03	73	.26	.07	67	.27	.10	55	.27	.11	41	.28	.14	31	.23	.06	52
Jacksonville	0.01	0.05	82	.98	.02	81	.99	.03	78	.03	.07	71	.08	.12	62	.12	.16	56	.04	.08	69
Keokuk	9.33	9.97	77	.34	.99	74	.38	.03	67	.40	.07	54	.41	.09	40	.44	.13	31	.36	.03	52
Key West	0.04	0.03	85	.99	.01	84	.97	.99	83	.97	.99	79	.04	.06	74	.10	.12	70	.03	.05	78
Knoxville	0.05	0.05	76	.04	.04	75	.09	.10	70	.11	.14	60	.12	.18	47	.13	.20	38	.07	.10	58
La Crosse	9.17	9.95	73	.20	.98	70	.22	.01	62	.22	.02	50	.24	.06	34	.26	.10	22	.21	.01	46
Las Animas	6.07	9.89	77	.08	.92	73	.07	.96	64	.06	.04	51	.06	.16	35	.04	.18	29	03	.02	50
Leavenworth	9.11	9.97	77	.12	.99	75	.15	.02	68	.18	.07	56	.20	.12	41	.24	.18	30	.15	.04	53
Little Rock	9.89	0.01	80	.68	.00	79	.73	.03	73	.77	.10	64	.80	.14	51	.82	.17	43	.74	.07	62
Los Angeles	9.58	9.94	69	.55	.91	70	.55	.91	68	.62	.98	62	.68	.04	58	.71	.08	55	.63	.99	61

MONTHLY NORMAL PRESSURE (15 YEARS) AND TEMPERATURE (8 YEARS).

Station.	Latitude.	Longitude.	Height.	January.			Feb.			March.			April.			May.			June.		
				Pressure.		Temp.	Pressure.		Temp	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.
				Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob	Re	
	° ′	° ′				°			°			°			°			°			°
Louisville	38 15	85 45	551	9.56	0.18	34	.53	.14	40	.46	.07	44	.41	.00	56	.41	.99	67	.41	.99	74
Lynchburg	37 25	79 9	658	9.45	0.17	36	.42	.14	41	.33	.05	45	.30	.00	56	.33	.01	67	.34	.02	74
Maginnis	47 12	109 10	4370	5.41	0.14	18	.46	.16	21	.49	.09	31	.51	.03	39	.53	.96	49	.55	.90	58
Marquette	46 34	87 24	672	9.28	0.05	14	.29	.06	15	.28	.04	22	.26	.00	37	.25	.98	50	.22	.94	58
Memphis	35 9	90 3	320	9.83	0.19	39	.79	.15	45	.72	.07	51	.65	.99	62	.65	.99	71	.66	.99	78
Milwaukee	43 2	87 54	697	9.30	0.10	18	.30	.09	23	.25	.03	30	.22	.99	42	.22	.98	55	.21	.96	62
Mobile	30 41	88 2	35	0.15	0.19	50	.12	.15	56	.06	.09	60	.00	.03	67	.98	.01	74	.99	.02	80
Montgomery	32 23	86 18	217	9.96	0.20	48	.92	.16	53	.85	.09	57	.80	.04	65	.79	.02	73	.80	.03	79
Moorhead	46 52	96 44	926	9.07	0.17	−1	.06	.15	5	.04	.10	19	.96	.98	39	.93	.93	55	.90	.87	65
Mt. Wash	44 16	71 18	6279	3.39	0.07	6	.39	.05	7	.39	.02	9	.54	.98	21	.74	.98	35	.82	.93	44
Nashville	36 10	86 47	549	9.57	0.17	37	.54	.14	43	.47	.06	48	.41	.98	59	.42	.99	69	.42	.99	75
New Haven	41 18	72 56	107	9.99	0.12	26	.96	.09	29	.86	.99	33	.85	.97	46	.88	.00	57	.87	.99	66
New London	41 21	72 5	47	0.05	0.10	29	.03	.08	30	.93	.98	35	.92	.97	46	.96	.01	56	.94	.99	65
New Orleans	29 58	90 4	52	0.11	0.16	54	.07	.12	59	.02	.07	62	.96	.01	69	.94	.99	75	.95	.00	81
New York	40 43	74 0	185	9.92	0.12	30	.90	.12	32	.80	.00	36	.78	.98	48	.81	.00	59	.80	.99	68
Norfolk	36 51	76 17	69	0.13	0.16	40	.11	.14	44	.01	.04	46	.97	.00	56	.99	.02	67	.99	.02	74
Northfield	44 10	72 41	871	9.07	0.07	18	.06	.06	20	.00	.98	27	.00	.96	38	.03	.97	53	.01	.93	62
North Platte	41 8	100 45	2841	7.08	0.22	19	.07	.17	24	.05	.10	35	.01	.98	48	.01	.93	59	.03	.90	68
Olympia	47 3	122 53	36	9.99	0.03	38	.99	.03	38	.97	.01	44	.99	.03	48	.01	.05	54	.00	.04	59
Omaha	41 16	95 56	1113	8.94	0.22	17	.91	.17	23	.86	.09	35	.78	.98	50	.78	.95	63	.78	.93	72
Oswego	43 29	76 35	335	9.70	0.09	24	.70	.09	25	.62	.00	29	.61	.99	42	.62	.99	55	.60	.96	63
Palestine	31 45	95 40	533	9.62	0.20	45	.56	.13	51	.51	.07	59	.44	.99	66	.44	.99	72	.45	.99	79
Pensacola	30 25	87 13	30	0.16	0.19	52	.13	.16	57	.07	.10	60	.01	.04	67	.99	.02	74	.00	.03	80
Philadelphia	39 57	75 9	117	0.02	0.16	31	.99	.13	34	.89	.02	39	.86	.99	50	.89	.02	62	.87	.00	71
Pike's Peak	38 50	105 2	14134	7.49		2	.51		3	.56		8	.63		13	.79		23	.95		33
Pittsburg	40 32	80 2	847	9.19	0.15	31	.18	.13	34	.10	.04	38	.08	.00	51	.10	.00	64	.10	.99	70
Poplar River	48 8	105 10	2000	7.84	0.18	−2	.86	.17	4	.87	.08	26	.82	.98	41	.79	.89	54	.77	.84	65
Port Huron	43 0	82 26	639	9.36	0.10	20	.35	.08	23	.29	.02	27	.28	.99	41	.29	.98	53	.28	.96	63
Portland, Me.	43 39	70 15	99	9.93	0.05	23	.90	.01	26	.81	.92	32	.81	.92	44	.86	.97	55	.83	.94	64
Portland, Ore.	45 32	122 43	80	0.00	0.09	39	.99	.08	39	.95	.04	47	.96	.05	51	.96	.05	57	.96	.05	62
Prescott	34 33	112 28	5389	4.72	0.15	35	.71	.11	38	.70	.06	43	.67	.97	49	.69	.91	58	.73	.87	67
Red Bluff	40 10	122 15	342	9.78	0.15	46	.74	.11	48	.68	.05	55	.65	.01	59	.59	.95	67	.54	.00	75
RioGrande C'y	26 23	98 48	230	9.96	0.21	56	.89	.14	63	.82	.06	69	.74	.98	76	.73	.97	80	.75	.99	85
Rochester	43 8	77 42	621	9.38	0.09	23	.38	.09	25	.30	.00	29	.30	.99	42	.32	.98	57	.30	.96	65
Roseburg	43 13	123 20	523	9.56	0.13	41	.54	.11	41	.51	.07	47	.51	.07	51	.51	.06	56	.51	.06	61
Sacramento	38 35	121 30	64	0.07	0.14	46	.04	.11	49	.99	.06	55	.95	.02	57	.89	.96	63	.84	.91	68
St. Louis	38 38	90 12	571	9.53	0.16	29	.50	.13	35	.44	.06	43	.37	.97	56	.37	.96	66	.37	.96	74
St. Paul	44 58	93 3	831	9.16	0.13	9	.14	.10	16	.11	.04	28	.05	.95	45	.03	.91	59	.03	.90	67
St. Vincent	48 56	97 14	804	9.21	0.18	−7	.22	.18	0	.19	.12	14	.13	.02	35	.08	.94	53	.04	.89	63
Salt Lake City	40 46	111 54	4348	5.68	0.25	29	.65	.20	32	.62	.10	41	.57	.00	48	.57	.93	58	.59	.88	68
San Antonio	29 27	98 28	781	9.33	0.17	50	.28	.12	55	.22	.05	62	.15	.97	68	.13	.95	74	.14	.95	81
San Diego	32 43	117 10	67	0.03	0.10	54	.02	.09	54	.00	.07	56	.96	.03	58	.91	.98	62	.88	.95	64
Sandusky	41 25	82 40	629	9.40	0.12	26	.39	.10	29	.33	.04	34	.31	.00	46	.32	.00	59	.31	.98	68
San Francisco	37 48	122 26	60	0.07	0.13	50	.04	.10	51	.02	.08	53	.98	.04	54	.94	.00	57	.90	.96	58
Santa Fe	35 41	105 57	7026	3.23	0.17	27	.21	.09	32	.21	.02	39	.20	.95	45	.26	.91	55	.32	.89	64
Savannah	32 5	81 5	87	0.10	0.20	51	.07	.17	56	.00	.10	59	.95	.05	66	.94	.01	74	.95	.04	80
Shreveport	32 30	93 40	249	9.93	0.19	45	.88	.13	51	.81	.06	58	.74	.98	67	.74	.98	74	.75	.99	81
Sill	34 40	98 23	1200	8.89	0.17	34	.84	.11	41	.78	.03	50	.70	.93	61	.69	.92	69	.71	.93	77
Spokane	47 40	117 25	1909	7.98	0.11	25	.99	.11	27	.96	.02	40	.95	.99	47	.95	.95	56	.94	.92	63
Springfield, Ill	39 48	89 39	644	9.45	0.17	26	.42	.13	32	.36	.06	40	.30	.99	53	.31	.99	64	.30	.97	72
Springfield, Mo	37 12	93 18	1356	8.66	0.17	30	.63	.13	37	.59	.06	44	.54	.98	56	.55	.97	66	.57	.97	73
Sully	44 39	100 39	1600	8.35	0.20	8	.34	.17	15	.31	.09	29	.26	.99	45	.21	.89	59	.21	.86	68
Toledo	41 40	83 34	673	9.38	0.11	25	.37	.09	29	.30	.02	34	.28	.98	47	.29	.98	60	.28	.96	69
Vicksburg	32 22	90 53	222	9.95	0.19	47	.91	.15	54	.84	.08	58	.78	.01	66	.77	.00	73	.79	.02	79
Washington	38 54	77 3	106	0.05	0.18	32	.02	.14	36	.92	.04	40	.87	.99	52	.91	.03	65	.89	.01	72
Wilmington	34 14	77 57	52	0.12	0.17	47	.09	.14	52	.00	.05	54	.96	.01	61	.97	.02	70	.98	.03	76
Winnemucca	40 58	117 43	4344	5.66	0.20	30	.63	.15	32	.61	.06	41	.57	.98	47	.57	.93	55	.58	.88	63
Wood's Holl	41 33	70 40	35	0.04	0.08	29	.00	.04	31	.91	.95	34	.88	.92	45	.96	.00	55	.92	.96	64
Yankton	42 54	97 28	1234	8.78	0.20	13	.76	.16	18	.72	.09	30	.64	.97	46	.62	.92	60	.62	.90	69
Yuma	32 45	114 36	141	9.93	0.08	53	.90	.05	57	.84	.99	64	.76	.91	69	.69	.84	77	.63	.78	84

MONTHLY NORMAL PRESSURE (15 YEARS) AND TEMPERATURE (8 YEARS).

Station.	July.			August.			Sept.			October.			Nov.			Dec.			Year.		
	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.	Pressure.		Temp.
	Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.		Ob.	Re.	
			°			°			°			°			°			°			°
Louisville	9.43	0.00	78	.44	.01	76	.50	.08	70	.52	.11	59	.53	.13	46	.55	.17	38	.48	.07	57
Lynchburg	9.33	0.00	78	.35	.03	75	.41	.09	70	.42	.11	59	.43	.14	46	.44	.16	38	.38	.08	57
Maginnis	5.62	9.93	64	.62	.94	62	.59	.00	51	.57	.07	41	.53	.12	32	.49	.18	22	.53	.03	41
Marquette	9.23	9.95	65	.27	.99	62	.27	.99	56	.26	.00	45	.26	.01	31	.26	.03	22	.26	.00	40
Memphis	9.69	0.02	81	.68	.01	79	.73	.07	73	.77	.11	63	.79	.14	50	.82	.18	42	.73	.07	61
Milwaukee	9.24	9.98	69	.26	.00	67	.29	.04	61	.28	.04	50	.28	.05	36	.29	.08	25	.26	.03	44
Mobile	0.01	0.04	81	.98	.01	80	.00	.03	77	.05	.08	69	.10	.14	57	.13	.17	52	.05	.08	67
Montgomery	9.81	0.04	81	.79	.01	80	.82	.05	76	.87	.10	67	.92	.16	55	.94	.18	49	.86	.10	65
Moorhead	8.95	9.91	68	.97	.94	65	.97	.96	55	.98	.00	42	.03	.08	24	.06	.15	8	.99	.02	37
Mt Washington	3.87	9.93	48	.90	.99	46	.87	.03	41	.74	.04	30	.54	.02	18	.43	.04	10	.64	.00	26
Nashville	9.44	0.00	78	.44	.00	77	.49	.06	71	.52	.10	62	.54	.13	48	.56	.16	40	.48	.06	59
New Haven	9.85	9.97	71	.90	.02	69	.97	.09	64	.96	.08	52	.95	.07	41	.96	.09	31	.92	.04	49
New London	9.92	9.97	71	.97	.02	69	.03	.08	64	.03	.08	54	.01	.06	43	.02	.07	33	.98	.03	50
New Orleans	9.98	0.03	82	.95	.00	82	.96	.01	78	.01	.06	71	.07	.12	60	.09	.14	55	.01	.06	69
New York	9.79	9.98	73	.83	.02	71	.90	.09	66	.90	.09	56	.88	.08	44	.90	.10	34	.85	.05	51
Norfolk	9.98	0.01	79	.99	.02	76	.06	.09	72	.08	.11	63	.09	.12	51	.11	.14	43	.04	.07	59
Northfield	9.03	9.94	70	.07	.98	67	.13	.05	60	.10	.04	48	.07	.04	35	.06	.05	23	.05	.01	43
North Platte	7.09	9.94	73	.10	.96	71	.11	.01	62	.11	.07	50	.11	.16	34	.10	.20	25	.07	.05	47
Olympia	0.02	0.06	62	.98	.02	62	.00	.04	56	.02	.06	49	.03	.07	44	.00	.04	41	.00	.04	50
Omaha	8.83	9.97	76	.84	.99	73	.86	.03	65	.89	.08	53	.91	.14	37	.94	.20	24	.86	.06	49
Oswego	9.60	9.96	69	.64	.00	67	.70	.06	62	.69	.06	50	.67	.05	39	.68	.06	29	.65	.02	46
Palestine	9.49	9.03	81	.47	.01	80	.50	.05	75	.51	.09	66	.58	.15	55	.60	.17	49	.52	.08	65
Pensacola	0.02	0.05	81	.98	.01	81	.00	.03	78	.05	.08	70	.10	.13	59	.14	.16	51	.05	.08	67
Philadelphia	9.86	9.99	76	.90	.03	73	.97	.10	68	.98	.11	57	.98	.11	45	.99	.13	35	.93	.06	53
Pike's Peak	7.08		40	.06		38	.96		31	.81		21	.66		11	.56		7	.76		19
Pittsburg	9.11	9.99	74	.13	.02	72	.19	.08	67	.19	.09	56	.18	.11	43	.18	.13	34	.14	.05	53
Poplar River	7.82	9.87	68	.85	.91	66	.85	.95	56	.86	.02	39	.87	.09	24	.89	.19	6	.84	.01	37
Port Huron	9.29	9.96	68	.32	.99	67	.36	.04	61	.36	.05	50	.34	.05	36	.34	.07	26	.32	.02	45
Portland, Me	9.81	9.92	69	.87	.98	67	.94	.05	60	.93	.04	50	.90	.01	39	.90	.02	29	.87	.98	47
Portland, Ore	9.95	0.03	66	.93	.02	64	.94	.03	60	.99	.08	52	.01	.10	44	.99	.08	42	.97	.06	52
Prescott	4.79	9.88	72	.79	.90	70	.77	.95	63	.76	.03	53	75	.11	42	.74	.13	39	.74	.01	52
Red Bluff	9.52	9.87	82	.51	.86	80	.56	.92	72	.66	.02	62	.75	.12	52	.77	.14	48	.65	.01	62
Rio Grande City	9.77	0.00	86	.75	.99	84	.78	.02	81	.86	.10	74	.91	.16	64	.93	.18	59	.82	.06	74
Rochester	9.30	9.95	69	.35	.00	67	.30	.05	62	.39	.06	50	.36	.05	38	.36	.06	28	.34	.02	46
Roseburg	9.50	0.01	66	.47	.02	65	.49	.04	60	.55	.11	51	.57	.14	44	.55	.12	43	.52	.03	52
Sacramento	9.82	9.89	72	.80	.87	71	.87	.94	69	.94	.01	60	.03	.10	52	.06	.13	48	.94	.01	59
St Louis	9.41	9.99	79	.41	.99	77	.46	.05	70	.48	.08	58	.50	.12	44	.52	.15	34	.45	.06	55
St. Paul	9.06	9.93	71	.08	.95	69	.09	.97	59	.10	.99	48	.11	.04	30	.14	.09	18	.09	.99	43
St. Vincent	9.06	9.91	65	.08	.93	62	.09	.95	53	.12	.00	40	.17	.09	20	.20	.15	5	.13	.02	33
Salt Lake City	5.63	9.87	75	.63	.88	74	.65	.96	61	.68	.09	51	.72	.23	37	.71	.24	34	.64	.05	51
San Antonio	9.19	0.00	83	.17	.98	82	.20	.01	77	.25	.07	69	.30	.13	58	.31	.15	53	.22	.04	68
San Diego	9.88	9.95	67	.85	.92	69	.85	.92	66	.92	.99	62	.98	.05	58	.01	.08	56	.94	.01	60
Sandusky	9.32	9.99	73	.34	.01	70	.39	.06	66	.39	.08	54	.37	.07	40	.39	.10	30	.36	.05	49
San Francisco	9.90	9.96	59	.88	.94	58	.89	.95	60	.96	.02	58	.04	.10	55	.06	.12	52	.97	.03	56
Santa Fe	3.41	9.94	68	.41	.97	65	.38	.99	59	.34	.04	50	.30	.13	37	.25	.15	31	.30	.02	48
Savannah	9.96	0.05	82	.94	.03	80	.97	.06	76	.01	.11	68	.05	.15	58	.08	.18	52	.00	.10	67
Shreveport	9.78	0.02	83	.76	.00	82	.80	.04	76	.85	.09	66	.89	.14	54	.91	.16	48	.82	.07	65
Sill	8.76	9.98	82	.76	.98	80	.79	.01	73	.82	.05	61	.86	.11	48	.87	.14	40	.79	.02	60
Spokane	7.96	9.92	69	.94	.91	67	.98	.98	57	.02	.06	46	.05	.14	35	.02	.12	30	.98	.02	47
Springfield, Ill	9.34	0.00	76	.35	.02	74	.39	.06	67	.41	.09	56	.41	.11	42	.44	.15	31	.37	.06	53
Springfield, Mo	8.60	9.90	76	.60	.00	75	.63	.04	68	.65	.09	58	.65	.12	44	.65	.15	34	.61	.06	55
Sitka	8.27	9.91	73	.29	.94	68	.30	.99	57	.31	.03	46	.34	.11	30	.36	.17	18	.30	.03	43
Toledo	9.30	9.98	74	.32	.00	70	.36	.05	65	.36	.06	53	.35	.06	40	.37	.09	30	.33	.03	50
Vicksburg	9.82	0.05	81	.79	.02	80	.82	.05	75	.88	.11	67	.92	.16	55	.94	.18	50	.85	.09	65
Washington	9.88	9.99	76	.92	.04	74	.99	.11	69	.00	.12	58	.01	.13	45	.03	.16	35	.96	.08	55
Wilmington	9.98	0.03	80	.97	.02	78	.02	.07	74	.05	.10	66	.08	.13	55	.10	.16	40	.03	.08	64
Winnemucca	5.61	9.85	72	.60	.86	70	.63	.95	60	.66	.07	47	.69	.20	35	.69	.21	33	.62	.02	49
Wood's Holl	9.93	9.97	70	.98	.00	68	.03	.07	63	.01	.05	54	.01	.05	45	.01	.05	34	.97	.01	49
Yankton	8.66	9.93	73	.68	.95	71	.69	.98	62	.71	.03	50	.74	.11	33	.77	.17	20	.70	.04	45
Yuma	9.66	9.80	91	.64	.78	90	.66	.81	83	.76	.91	71	.87	.02	60	.91	.06	50	.77	.92	72

TABLE XLV.—NORMAL WIND DIRECTION.

Station.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Abilene	s 85 w	s 65 w	s 13 w	s 22 w	s 30 e	s 28 e	s 30 e	s 48 e	s 41 e	s 33 e	s 45 w	s 79 e	s 20 e
Albany	n 72 w	n 72 w	n 69 w	n 66 w	s 70 w	s 57 w	s 61 w	s 44 w	s 61 w	s 78 w	n 89 w	n 76 w	s 87 w
Alpena	s 75 w	s 86 w	n 67 w	n 74 w	n 5 e	s 19 w	s 72 w	s 77 w	s 63 w	s 76 w	s 72 w	s 80 w	s 79 w
Apache	n 86 e	n 89 e	s 87 e	s 40 e	s 87 e	s 71 e	s 75 e	s 75 e	n 89 e	s 85 e	n 75 e	n 83 e	s 85 e
Assinaboine	s 72 w	s 52 w	s 66 w	s 53 w	s 72 w	s 68 w	s 79 w	s 59 w	s 59 w	s 60 w	s 62 w	s 65 w	s 64 w
Atlanta	n 45 w	n 75 w	n 86 w	s 67 w	s 68 w	s 34 w	s 89 w	n 53 e	n 72 e	n 54 e	n 55 w	n 72 w	n 60 w
Atlantic City	n 57 w	n 65 w	n 66 w	n 44 w	s 7 w	s 12 w	s 11 w	s 20 e	s 32 e	n 86 w	n 75 w	n 69 w	s 80 w
Augusta	n 52 w	n 78 w	s 68 w	s 52 w	s 29 e	s 12 e	s 13 e	n 88 e	n 58 e	n 20 e	n 40 w	n 50 w	n 62 w
Baltimore	n 48 w	n 32 w	n 40 w	n 24 w	s 45 e	s 46 w	s 72 w	s 38 e	n 25 e	s 35 w	n 52 w	n 54 w	n 54 w
Benton	n 89 w	s 85 w	n 69 w	n 65 w	s 84 w	s 74 w	s 84 w	s 82 w	s 82 w	s 72 w	s 80 w	s 68 w	s 86 w
Bismarck	n 24 w	n 7 w	n 5 e	n 34 e	n 48 e	n 60 e	n 58 e	n 50 e	n 11 w	n 13 w	n 18 w	n 30 w	n 4 e
Block Island	n 28 w	n 37 w	n 39 w	n 57 w	s 32 w	s 51 w	s 53 w	s 43 w	s 60 w	n 36 w	n 54 w	n 35 w	n 71 w
Boise City	s 54 w	n 28 w	s 12 w	s 74 w	n 38 w	n 46 w	n 54 w	n 46 w	n 66 w	n 72 w	n 85 w	n 86 w	n 61 w
Boston	n 71 w	n 69 w	n 61 w	n 51 w	s 79 w	s 72 w	s 77 w	s 76 w	s 84 w	n 86 w	n 76 w	n 76 w	n 80 w
Brownsville	n 53 e	s 87 e	s 68 e	s 53 e	s 49 e	s 37 e	s 28 e	s 46 e	s 84 e	s 85 e	n 37 e	n 71 e	s 57 e
Buffalo	s 57 w	s 54 w	s 72 w	s 53 w	s 49 w	s 44 w	s 58 w	s 49 w	s 52 w	s 62 w	s 73 w	s 74 w	s 57 w
Buford	n 74 w	n 71 w	n 30 w	n 35 e	n 14 e	s 89 e	n 39 e	n 57 e	n 41 w	n 61 w	n 88 w	n 85 w	n 41 w
Cairo	n 85 w	n 50 w	n 40 w	s 12 e	s 20 e	s 3 w	s 20 w	s 17 w	s 62 e	s 1 w	s 70 w	n 83 w	s 28 w
Cedar Keys	n 46 e	n 17 e	s 70 w	s 65 w	s 78 w	s 50 w	s 60 w	s 68 w	n 38 e	n 28 e	n 28 e	n 18 e	n 26 w
Charleston	n 34 w	n 35 w	s 56 w	s 39 w	s 4 w	s 16 w	s 24 w	s 4 e	n 70 e	n 39 e	n 13 w	n 45 w	s 49 w
Charlotte	n 11 w	s 70 w	s 73 w	s 51 w	s 32 w	s 10 w	s 50 w	e	e	n 43 e	n 64 w	n 73 w	s 61 w
Chattanooga	w	n 83 w	n 80 w	n 58 w	s 72 w	s 59 w	n 76 w	s 80 w	n 25 e	n 21 e	s 72 w	s 65 w	s 89 w
Cheyenne	n 74 w	n 75 w	n 67 w	n 60 w	n 80 w	s 88 w	s 72 w	s 70 w	n 82 w	n 72 w	n 71 w	n 71 w	n 63 w
Chicago	s 61 w	s 51 w	n 69 w	n 27 e	s 85 e	s 19 w	s 43 w	s 71 e	s 21 w	s 36 w	s 59 w	s 59 w	s 53 w
Cincinnati	s 55 w	s 77 w	n 64 w	n 59 w	s 57 e	s 2 e	s 53 w	n 73 e	s 45 e	s 1 w	s 38 w	s 45 w	s 38 w
Cleveland	s 33 w	s 41 w	s 78 w	n 10 w	n 79 e	s 38 e	s 16 e	s 73 e	s 30 e	s 7 e	s 27 w	s 35 w	s 16 w
Columbus	s 44 w	s 48 w	n 82 w	n 68 w	n 63 w	n 36 w	s 85 w	n 86 w	s 37 w	s 59 w	s 57 w	s 36 w	s 61 w
Corpus Christi	n 53 e	s 87 e	s 63 e	s 41 e	s 43 e	s 29 e	s 19 e	s 38 e	s 65 e	s 78 e	n 52 e	n 62 e	s 55 e
Custer	s 42 w	s 79 w	s 80 w	n 23 e	s 79 w	n 56 e	n 47 e	n 64 e	n 21 e	n 34 e	s 4 w	n 33 w	n 6 e
Davenport	n 85 w	n 69 w	n 19 w	n 20 e	s 56 e	s 29 w	s 46 w	s 5 w	s 42 w	s 63 w	n 82 w	n 82 w	n 88 w
Davis	s 44 w	s 29 w	s 51 w	s 47 w	s 31 w	s 17 w	s 63 e	n 83 e	s 89 e	s 21 w	s 59 w	s 56 w	s 31 w
Deadwood	s 48 w	s 47 w	s 2 e	s 32 e	s 52 w	s 9 w	n 69 e	s 49 e	n	n 31 e	s 38 w	n 87 w	s 34 w
Denver	s 22 w	s 19 w	s 47 w	n 21 w	s 4 e	s 26 e	s	s 2 w	s 26 e	s 26 e	s	s 18 w	s 4 w
Des Moines	n 40 w	n 45 w	n 5 w	n 74 e	s 49 e	s 1 e	s 32 w	s 53 w	s 48 w	s 66 w	n 54 w	n 42 w	n 65 w
Detroit	s 67 w	s 80 w	n 60 w	n 9 w	s 43 w	s 35 w	s 67 w	s 35 w	s 60 w	s 70 w	s 69 w	s 75 w	s 73 w
Dodge City	n 60 w	n 48 w	n 6 w	n 15 e	s 44 e	s 35 e	s 38 e	s 37 e	s 25 e	s 41 e	n 52 w	n 46 w	s 33 e
Dubuque	w	n 89 w	n 59 w	n 34 e	s 14 e	s 6 w	s 39 w	s 26 w	s 28 w	s 61 w	s 81 w	n 76 w	s 71 w
Duluth	n 87 w	n 43 w	n 10 w	n 20 e	n 24 e	n 13 e	n 14 w	n 3 w	n 35 w	n 32 w	n 72 w	n 86 w	n 7 w
Eastport	n 57 w	n 52 w	n 33 w	n 20 w	s 26 w	s 19 w	s 23 w	s 32 w	s 44 w	s 88 w	n 60 w	n 53 w	s 89 w
Elliott	n 66 w	n 57 w	n 75 e	s 34 e	s 62 e	s 35 e	s 30 e	s 36 e	s 23 e	s 19 e	n 56 w	n 41 w	s 26 e

XLV.—NORMAL WIND DIRECTION.

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Station.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
El Paso	n 58 w	n 75 w	n 75 w	n 79 w	n 76 w	n 64 w	n 38 e	n 78 e	n 76 e	n 21 w	n 37 w	n 67 w	n 62 w
Erie	s 46 w	s 69 w	s 82 w	s 84 w	s 57 w	s 44 w	s 70 w	s 16 w	s 13 w	s 27 w	s 46 w	s 47 w	s 48 w
Escanaba	n 84 w	n 59 w	n 14 w	n 11 e	n 67 e	s 10 e	s 45 w	s 46 w	s 64 w	s 78 w	n 80 w	n 74 w	n 80 w
Ft. Smith	n 69 e	n 59 e	n 71 e	s 76 e	s 48 e	s 42 e	s 40 e	s 66 e	s 66 e	s 68 e	n 74 e	n 59 e	s 69 e
Galveston	n 62 e	s 74 e	s 41 e	s 38 e	s 31 e	s 15 e	s 3 e	s 27 e	s 64 e	s 83 e	n 86 e	n 87 e	s 45 e
Grand Haven	s 48 w	s 46 w	n 41 w	n 4 e	s 43 w	s 42 w	s 59 w	s 49 w	s 16 w	s 24 w	s 67 w	n 85 w	s 39 w
Grant	n 40 e	n 10 e	n 21 w	n 28 w	n 41 w	n 25 w	n 28 w	n 51 e	n 42 e	n 32 e	n 32 e	n 20 e	n 1 e
Hatteras	n 11 w	n 22 e	n 22 e	n 13 e	n 66 e	s 1 e	s 20 w	s 31 e	n 60 e	n 32 e	n 4 e	n 16 w	n 28 e
Helena	n 74 w	s 39 w	s 74 w	s 84 w	s 61 w	s 52 w	s 50 w	s 47 w	s 60 w	s 71 w	s 86 w	n 83 w	s 72 w
Indianapolis	s 61 w	s 78 w	n 72 w	s 73 w	s 39 w	s 23 w	s 70 w	s 72 w	s 28 w	s 30 w	s 58 w	s 63 w	s 58 w
Jacksonville	n 30 w	n 27 w	s 33 w	s 25 w	s 70 e	s 28 e	s 6 e	s 45 e	n 68 e	n 32 e	n 6 w	n 23 w	n 81 e
Keokuk	n 85 w	n 52 w	n 22 w	n 55 e	s 38 e	s 4 w	s 1 w	s 41 e	s 4 w	s 43 w	s 88 w	n 75 w	s 62 w
Key West	n 59 e	n 66 e	n 76 e	n 87 e	n 82 e	s 65 e	s 71 e	s 76 e	n 88 e	n 60 e	n 54 e	n 53 e	n 78 e
Knoxville	n 89 w	n 84 w	n 60 w	n 70 w	n 68 w	s 76 w	n 81 w	n	n 20 e	n 22 w	n 41 w	n 30 w	n 50 w
La Crosse	s 65 w	s 77 w	n 59 w	n 28 w	s 27 w	s 25 w	s 42 w	s 32 w	s 31 w	s 44 w	s 72 w	s 86 w	s 55 w
Las Animas	n 57 w	n 55 w	n 1 e	s 75 w	s 66 e	s 57 e	s 47 e	s 71 e	s 1 e	s 20 w	n 57 w	n 58 w	n 64 w
Leavenworth	n 70 w	n 46 w	n 4 w	n 66 e	s 33 e	s 33 e	s 22 e	s 24 e	s 40 e	s 15 e	s 33 w	n 47 w	s 1 w
Little Rock	n 8 e	n 85 e	n 41 e	s 25 e	s 45 e	s 1 e	s 25 e	n 87 e	s 82 e	n 66 e	n 73 w	n 23 e	s 75 e
Los Angeles	n 36 e	n 38 e	n 57 w	s 80 w	n 86 w	s 72 w	s 76 w	s 83 w	s 80 w	w	n 3 w	n 37 e	n 87 w
Louisville	s 70 w	s 60 w	s 85 w	s 50 w	s 28 w	s 24 w	s 60 w	n 35 w	s 39 w	s 27 w	s 52 w	s 48 w	s 50 w
Lynchburg	s 80 w	s 83 w	n 83 w	s 78 w	s 43 w	n 40 w	s 55 w	s 56 w	s 76 e	s 68 w	s 80 w	s 81 w	s 72 w
Maginnis	n 55 w	n 60 w	n 63 w	n 59 w	n 55 w	n 48 w	n 50 w	n 38 w	n 40 w	n 45 w	n 49 w	n 54 w	n 51 w
Marquette	s 85 w	n 70 w	n 36 w	n 33 w	n 46 w	n 64 w	n 81 w	n 86 w	s 73 w	s 78 w	s 82 w	s 80 w	n 82 w
Memphis	n 68 w	n 23 w	s 45 w	s 16 w	s 11 w	s 21 w	s 80 w	n 41 w	n 10 e	n 67 w	s 77 w	n 50 w	s 77 w
Milwaukee	n 87 w	n 88 w	n 48 w	n 23 e	n 60 e	s	s 61 w	s 9 w	s 54 w	s 75 w	s 89 w	n 88 w	n 87 w
Mobile	n 3 e	n 7 e	s 39 w	s 7 w	s 2 w	s 19 w	s 36 w	s 62 w	n 41 e	n 21 e	n 4 w	n 7 e	n 5 w
Montgomery	n 12 w	n 33 w	s 65 w	s 46 w	s 21 e	s 2 w	s 29 w	s 88 e	n 55 e	n 42 e	n 21 e	n 5 w	n 62 e
Moorhead	n 70 w	n 34 w	n 12 w	n 24 e	n 89 e	s 30 e	s 51 e	s 58 e	s 58 w	n 84 w	n 69 w	n 81 w	n 24 w
Mt. Washington	n 59 w	n 53 w	n 35 w	n 48 w	n 53 w	n 62 w	n 61 w	n 66 w	n 61 w	n 60 w	n 57 w	n 55 w	n 57 w
Nashville	n 86 w	n 86 w	n 76 w	s 40 w	s 36 w	s 58 w	s 83 w	n 9 w	n 13 e	s 75 w	s 70 w	s 82 w	s 88 w
New Haven	n 41 w	n 38 w	n 35 w	n 27 w	s 37 w	s 39 w	s 51 w	s 60 w	n 83 w	n 55 w	n 53 w	n 47 w	n 61 w
New London	n 50 w	n 54 w	n 49 w	n 44 w	s 46 w	s 46 w	s 54 w	s 61 w	n 67 w	n 58 w	n 52 w	n 51 w	n 67 w
New Orleans	n 46 e	n 73 e	s 50 e	n 56 w	s 48 e	s 62 e	s 6 w	s 57 e	n 69 e	n 53 e	n 49 e	n 53 e	s 85 e
New York	n 65 w	n 61 w	n 59 w	n 56 w	s 54 w	s 43 w	s 55 w	s 45 w	s 79 w	n 80 w	n 74 w	n 71 w	n 83 w
Norfolk	n 24 w	n 11 w	n 20 w	s 52 e	s 34 e	s 7 w	s 14 w	s 30 e	s 85 e	n 62 e	n 10 w	n 44 w	s 29 e
Northfield	s 4 w	s 66 w	n 60 w	n 39 w	s 70 w	s 29 w	s 18 w	s 4 w	s 7 w	s 25 w	s 68 w	s 7 w	s 38 w
North Platte	n 68 w	n 70 w	n 33 w	n 22 e	s 81 e	s 71 e	s 60 e	s 60 e	n 87 e	s 23 w	n 60 w	n 57 w	n 29 w
Olympia	s 9 w	s 6 w	s 25 w	s 32 w	s 66 w	n 89 w	n 56 w	n 45 w	s 48 w	s 8 w	s 5 w	s 17 w	s 35 w
Omaha	n 71 w	n 73 w	n 42 e	n 22 e	s 50 e	s 17 e	s 18 e	s 29 e	s 1 w	s 79 w	n 79 w	n 55 w	s 38 w

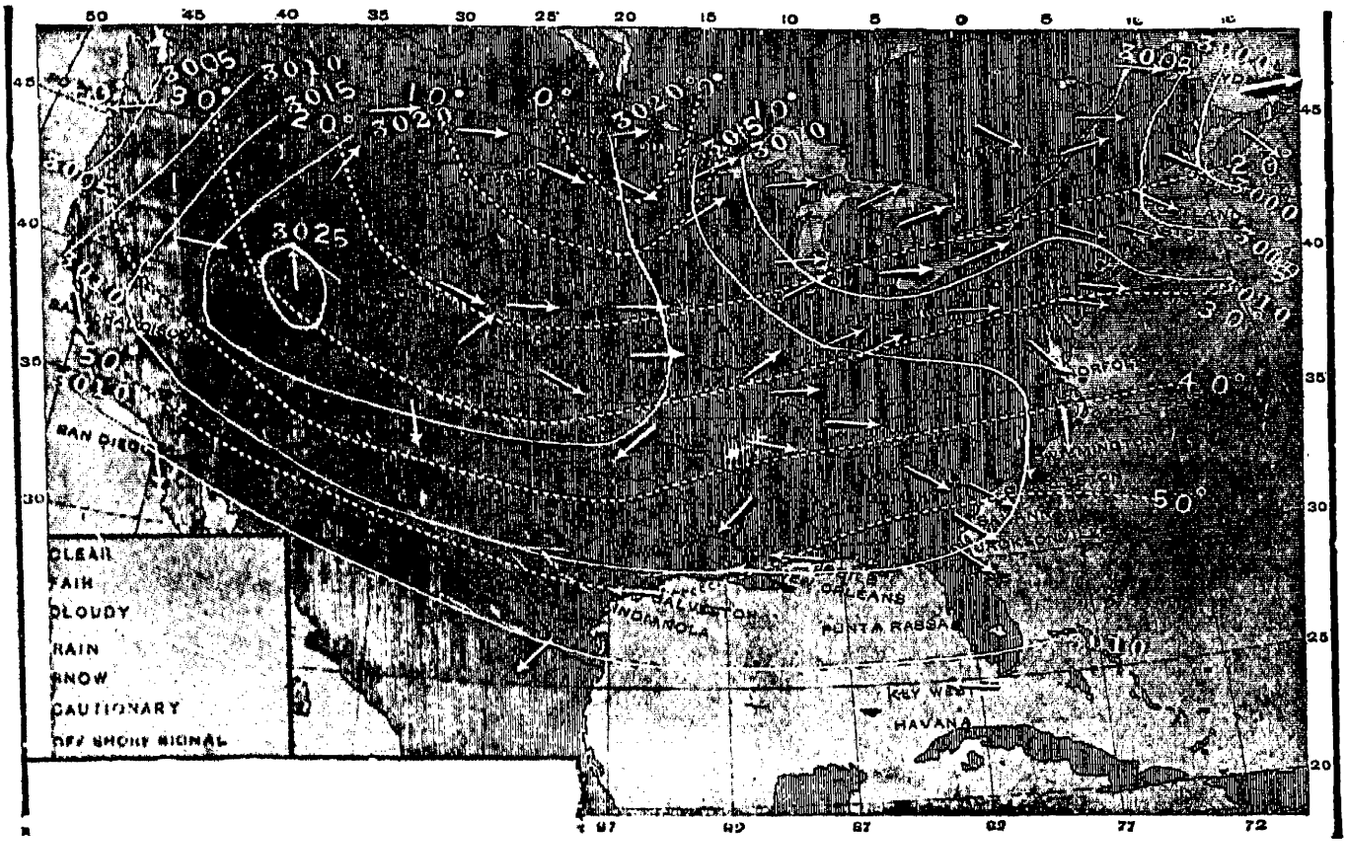
XLV.—NORMAL WIND DIRECTION.

Station.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Oswego	s 22 w	s 43 w	s 87 w	n 77 w	s 79 w	s 61 w	s 72 w	s 53 w	s 28 w	s 31 w	s 45 w	s 30 w	s 55 w
Palestine	n	s 12 e	s 18 e	s 18 e	s 32 e	s 21 e	s 17 e	s 44 e	s 70 e	s 63 e	s 6 e	n 35 w	s 33 e
Pensacola	n 49 e	s 89 e	s 18 w	s 8 e	s 28 e	s 18 w	s 42 w	s 8 w	s 70 e	n 60 e	n 41 e	n 36 e	s 56 e
Philadelphia	n 44 w	n 39 w	n 42 w	n 34 w	n 83 w	s 71 w	s 79 w	s 69 w	n 68 w	n 58 w	n 54 w	n 56 w	n 61 w
Pike's Peak	n 78 w	n 75 w	n 87 w	n 88 w	s 81 w	s 71 w	w	s 88 w	s 80 w	s 87 w	n 68 w	n 63 w	n 86 w
Pittsburg	s 88 w	n 72 w	n 63 w	n 47 w	n 63 w	n 86 w	n 71 w	n 50 w	n 62 w	n 70 w	n 89 w	s 83 w	s 71 w
Poplar River	n 38 w	n 39 w	n 30 w	n 66 w	n 62 w	s 9 e	n 17 w	n 57 e	n 74 w	n 67 w	n 60 w	n 42 w	n 45 w
Port Huron	s 45 w	s 45 w	n 45 w	n 8 e	n 31 e	s 54 e	n 29 w	s 71 e	s 17 w	s 33 w	s 51 w	s 54 w	s 51 w
Portland, Me	n 56 w	n 59 w	n 52 w	n 89 w	s 36 w	s 42 w	s 44 w	s 55 w	s 52 w	s 86 w	n 74 w	n 66 w	n 85 w
Portland, Ore	s 19 e	s 14 e	s 10 w	s 33 w	s 38 w	s 51 w	s 68 w	s 59 w	s 50 w	s 25 w	s 10 w	s 23 e	s 68 w
Prescott	s 25 w	s 43 w	s 22 w	s 22 w	s 22 w	s 23 w	s 27 w	s 29 w	s 20 w	s 16 w	s 26 w	s 15 w	s 28 w
Red Bluff	n 3 w	n 1 e	n 81 w	s 15 w	n 88 w	s 48 w	s 4 w	s 6 e	n 19 w	n 13 w	n 9 w	n 2 w	n 72 w
Rio Grande City	n 34 e	n 77 e	s 78 e	s 61 e	s 63 e	s 53 e	s 66 e	s 64 e	s 80 e	s 88 e	n 75 e	n 67 e	n 64 e
Rochester	s 62 w	s 70 w	s 85 w	n 77 w	w	s 80 w	s 88 w	s 76 w	s 67 w	s 64 w	s 67 w	s 66 w	s 75 w
Roseburg	s 6 w	s 27 w	s 51 w	s 68 w	n 89 w	n 54 w	n 48 w	n 46 w	n 83 w	s 71 w	s 15 w	s 4 w	n 42 w
Sacramento	n 43 e	n 42 w	s 18 w	s 30 w	s 34 w	s 18 w	s 15 w	s 10 w	s 23 w	s 50 w	n 4 e	n 40 e	s 14 w
St. Louis	s 76 w	n 67 w	n 35 w	s 7 e	s 29 e	s 6 w	s 1 w	s 42 e	s 22 e	s 29 w	s 62 w	s 61 w	s 44 w
St. Paul	s 73 w	s 70 w	n 62 w	n 10 w	s 75 e	s 4 e	s 31 w	s 4 e	s 2 w	s 37 w	s 82 w	s 79 w	s 33 w
St. Vincent	n 85 w	n 79 w	n 60 w	n 30 w	n 37 w	s 54 w	n 89 w	n 69 w	s 72 w	s 85 w	n 69 w	n 86 w	n 81 w
Salt Lake City	s 15 e	s 48 e	n 44 e	n 24 e	n 4 e	n 29 e	n 31 e	n 68 e	n 26 e	n 47 e	n 50 e	s 10 w	n 38 e
San Antonio	n 50 e	n 63 e	s 75 e	s 72 e	s 63 e	s 58 e	s 58 e	s 64 e	n 81 e	n 74 e	n 50 e	n 54 e	n 56 e
San Diego	n 5 w	n 36 w	n 58 w	n 73 w	s 86 w	s 88 w	n 84 w	n 82 w	n 64 w	n 50 w	n 21 w	n 10 w	s 57 w
Sandusky	s 55 w	s 64 w	n 73 w	n 20 w	s 45 w	s 9 e	s 79 w	s 69 w	s 27 w	s 40 w	s 59 w	s 56 w	s 57 w
San Francisco	n 15 w	n 80 w	s 84 w	s 78 w	s 73 w	s 63 w	s 64 w	s 62 w	s 65 w	s 79 w	n 67 w	n 34 w	s 76 w
Santa Fe	n 4 e	n 9 w	n 27 w	s 59 w	s 45 e	s 49 e	s 79 e	s 83 e	s 66 e	s 86 e	n 6 e	n 9 e	n 59 e
Savannah	n 56 w	n 73 w	s 60 w	s 31 w	s 7 e	s 6 w	s 17 w	s 7 e	n 73 e	n 30 e	n 23 w	n 55 w	s 35 w
Shreveport	n 23 e	s 46 e	s 24 e	s 9 e	s 28 e	s 17 e	s 24 e	s 69 e	e	s 82 e	s 66 e	s 59 e	s 44 e
Sill	n 12 w	n 22 w	n 23 e	s 37 e	s 45 e	s 37 e	s 44 e	s 61 e	s 45 e	s 40 e	n 31 w	n 12 w	s 58 e
Spokane Falls	n 55 w	s 13 w	s 14 w	s 26 w	s 40 w	s 38 w	s 55 w	s 61 w	s 65 w	s 39 w	n 84 w	n 81 w	s 47 w
Springfield, Ill	s 76 w	s 75 w	n 50 w	s 23 e	s 1 w	s 10 w	s 43 w	s 38 e	s 7 w	s 23 w	s 64 w	s 80 w	s 48 w
Sully	n 32 w	n 8 w	n 19 e	n 26 e	s 85 e	s 84 e	s 56 e	s 69 e	n 41 e	n 14 w	n 32 w	n 27 w	n 24 w
Toledo	s 51 w	s 57 w	n 81 w	n 79 w	s 61 w	s 40 w	s 64 w	s 67 w	s 35 w	s 40 w	s 52 w	s 51 w	s 57 w
Vicksburg	n 53 e	s 67 e	s 32 e	s 29 e	s 29 e	s 10 e	s 4 e	s 37 e	n 61 e	n 64 e	s 81 e	s 75 e	n 70 e
Washington	n 40 w	n 35 w	n 42 w	n 37 w	s 62 w	s 37 w	s 63 w	s 84 w	n 33 w	n 73 w	n 65 w	n 56 w	n 79 w
Wilmington	n 34 w	n 52 w	s 65 w	s 38 w	s 9 w	s 22 w	s 29 w	s 3 e	n 77 e	n 49 e	n 5 w	n 36 w	s 46 w
Winnemucca	s 54 w	s 54 w	s 79 w	s 53 w	s 66 w	s 79 w	s 68 w	s 50 w	s 60 w	n 67 w	n 37 e	w	s 64 w
Wood's Holl	n 58 w	n 49 w	n 63 w	n 74 w	s 52 w	s 46 w	s 41 w	s 44 w	s 35 w	n 84 w	n 52 w	n 49 w	s 89 w
Yankton	n 57 w	n 51 w	n 29 w	n 2 w	s 89 e	s 23 e	s 31 e	s 35 e	s 64 w	n 85 w	n 55 w	n 54 w	n 58 w
Yuma	n	n 19 w	n 75 w	s 81 w	s 63 w	s 29 e	s 1 w	s 3 e	s 23 w	n 4 e	n 7 e	n 13 e	n 66 w

XLV.—NORMAL WIND DIRECTION.

FIFTEEN YEARS' NORMAL PRESSURE, TEMPERATURE, AND WIND DIRECTION. (LAMBERT'S FORMULA.)

January.



July.